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by Herbrand

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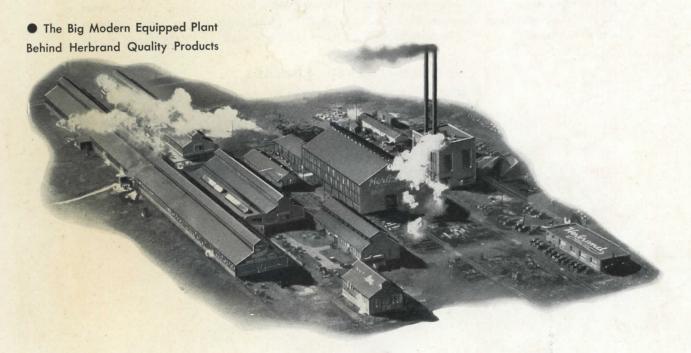
CATALOG NUMBER

HERBRAND...

THE GREATEST NAME IN TOOLS SINCE 1881

YEARS of continuous progress in the research, engineering and development of tools for the master mechanic have placed Herbrand in the forefront of the automotive and industrial fields. This experience has created the background so essential to intelligent service and is reflected in the high standard of quality found in Herbrand Tools today. Excellence of quality and revolutionary design have given them universal acceptance. Herbrand Tools raise the efficiency of the mechanic to the highest degree. The time-tested mark of distinction "Herbrand" or "Van-Chrome"

The time-tested mark of distinction "Herbrand" or "Van-Chrome" on any tool is your unqualified guarantee against faulty material or workmanship and positive assurance that they will give unfailing service on the work for which they are designed.



A group of ten modern buildings on a thirty acre tract of land houses the latest type equipment for the production of Herbrand Tools of Quality and Distinction.. The tool finishing building at the left is 740' long by 60' wide.



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Junior Series Van-Chrome Sockets

3/8" Square Drive—Thin Straight Walls Hot Forged from Chrome Molybdenum Steel

Small—Slender—Straight—Thinwalled—yet mighty in performance. Extra strength is *Hot Forged* into them. Advanced features of design provide unequalled advantages of speed and utility. This series covers a wide range of service in automotive, electrical, aviation and refrigeration work. Heat treated, knurled, have lock-on feature. Chrome plated with polished side walls.

12-Point Sockets

Number	Opening	Height	Wt. Po	er Doz. Ozs.
J-112	3/8	15/16		9
J-114	7/16	15/10		12
J-116	1/2	31/39		12
J-118	9/16	31/32		12
J-120	5/8	11/32		15
J-122	11/16	$1\frac{1}{32}$		15
J-124	3/8 7/6 1/2 9/6 5/8 11/6 3/4	$ \begin{array}{c} 31 \\ 31 \\ 32 \\ 31 \\ 32 \\ 11 \\ 32 \\ 11 \\ 32 \\ 13 \\ 32 \end{array} $	1	2
	8-Point			
J-212	3/8	31/32	1	12
J-214	7/16	31/32		15
J-216	3/8 7/16 1/2	31/32	1	2
	6-Point	Sockets		
J-608	1/4	15/16		6
J-610	5/16	15/16		6
E	ktra Deep 12-	Point Sock	ets	
J-414	7/16	21/16	1	8
J-416	1/2	21/16	1	8
J-418	9/16	21/16	1	8
J-420	716 1/2 916 5/8 11/16	$2\frac{1}{16}$ $2\frac{1}{16}$ $2\frac{1}{16}$ $2\frac{1}{2}$ $2\frac{1}{2}$ $2\frac{1}{2}$	1	8 8 8 8 8
J-422	11/16	$2\frac{1}{2}$	1	8
J-424	3/4	$2\frac{1}{2}$	1	8

Junior Flex Set No. JA-601/2

Popular with mechanics, electricians and car owners.

Contents, total of 9 pieces:—7 "Van-Chrome" 12-point Sockets Nos. J-112, J-114, J-116, J-118, J-120, J-122, J-124, providing a range of opening sizes from %" to ¾" inclusive. Junior Flexible Handle J-13. T Handle Bar J-33.

SET No. JA-60, in fibre box. Weight 1 lb.

SET No. JA-601/2, in metal box. Weight 2 lbs.

Junior Socket Set No. JA-611/2

A well balanced assortment of Junior 3/8" drive Sockets and Handles which cover a wide range of service in automotive, electrical, aviation and refrigeration work.

Contents, total of 16 pieces:—7 "Van-Chrome" 12-point Sockets Nos. J-112, J-114, J-116, J-118, J-120, J-122, J-124, with opening sizes from %" to ¾" inclusive. 8-point Sockets Nos. J-212, J-214, J-216 with openings of %", 76", ½". Junior Reversible Ratchet J-10. 17" Speeder No. J-17. Universal Joint J-35. Sliding T Handle J-21. Extensions: J-27, 5" long and J-29, 11" long.

SET No. JA-61, in fibre box. Weight 3 lbs. 4 ozs.

SET No. JA-611/2, in metal box. Weight 5 lbs. 13 ozs.



Junior Series Handles and Attachments

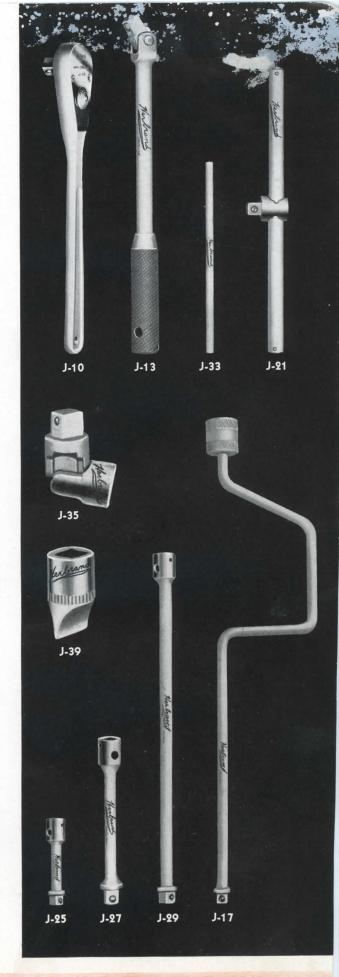
3/8" Square Drive—Extra Strong and Rigid Drop Forged from Chrome Molybdenum Steel

"Van-Chrome" Handles are correctly designed and proportioned to deliver the utmost speed and ease of handling. All unnecessary weight and clumsiness are eliminated. Comfortable grips contribute to their efficiency and careful heat treatment imparts extra strength and rigidity. Heavily chrome plated with brightly polished ends and faces. Equipped with friction balls to firmly engage the sockets and eliminate the danger of having them drop off in tight places. All Van-Chrome Handles are fully guaranteed.

- J-10 JUNIOR REVERSIBLE RATCHET OF EXCLU-SIVE HERBRAND DESIGN. Positive thumb control instantly reversible to operate the 20th of a turn either right or left. No delicate or complicated parts to cause grief; designed to operate in close, cramped quarters. Solid drop forged handle. Amazingly strong. Length 6%". Weight 8 ozs.
- J-13 FLEXIBLE OFFSET HANDLE. A flex handle, a swivel handle, an offset handle, a T handle and a nut spinner all in one. Perfectly balanced with a compact swivel joint on a comfortable grip, knurled handle. A friction ball holds the drive tip firmly at any angle. The handle is cross drilled to insert a T bar when needed and is featured with a square drive hole in the end for use with other attachments. Length 85%". Weight 7½ ozs.
- J-17 SPEEDER HANDLE. Forged solid. Light and slim, designed for extra speed and more clearance. Has a special knurled revolving handle for perfect grip. Length 17". Weight 1 lb. 1 oz.
- J-21 SLIDING T HANDLE. The forged head slides flush to the ends making an offset wrench. A friction ball holds the head firmly at any point on the bar. Length 8". Weight 4 ozs.

EXTENSIONS. Forged solid and cross drilled for use with T Bar J-33. The drive end is forged with an offset shoulder which acts as a positive stop. Equipped with lock-on feature.

- J-25 EXTENSION, 3" long. Weight 2 ozs.
- J-27 EXTENSION, 5" long. Weight 3 ozs.
- J-29 EXTENSION, 11" long. Weight 6 ozs.
- J-33 T HANDLE BAR. Used to form a T with all Herbrand Handles which are cross drilled for this purpose. Length 61/2". Weight 1 oz.
- J-35 UNIVERSAL JOINT, improved, short coupled, positive locking, facilitates adjustments in inaccessible places. Reaches where other universals fail. Weight 2 ozs.
- J-39 DRAG LINK SOCKET. A screw driver type socket with a 1½6" bit. Necessary for tightening slotted nuts on shock absorbers, steering gear assemblies, etc. Overall length 1½". Weight 1 oz.







Standard Series Van-Chrome Sockets

1/2" Square Drive—Extra Thin Straight Walls Hot Forged from Chrome Molybdenum Steel

All excess weight and clumsiness have been eliminated. Every Socket is individually Hot Forged which insures precision, accuracy, greater strength, durability, and compactness adapting them to faster performance. The height of each socket is graduated to a definite engineering formula to balance with the opening size and they are knurled for a non-slip grip. Equipped with lock-on feature which firmly locks the sockets to the handles but releases easily. Extra powered by scientific heat treatment. Chrome plated with mirror polished side walls.

12-Point Sockets

				Per Doz
Number	Opening	Height	Lbs.	Ozs.
S-112	3/8	11/16		12
S-114	3/8/16/2/16/19/2/19/2/19/2/16/2/19/2/19/2/1	$1\frac{1}{8}$ $1\frac{1}{8}$ $1\frac{1}{8}$ $1\frac{1}{8}$ $1\frac{1}{8}$ $1\frac{3}{8}$ $1\frac{3}{8}$ $1\frac{3}{8}$		12
S-116	1/2	11/8		15
S-118	9/16	11/8	1	2
‡S-118V	9/16	11/8	1	2
S-119	$^{19}/_{32}$	$1\frac{3}{32}$	1	2 2 2 2 5 8 14
S-120	5/8	15/16	1	2
S-121	21_{32}	13/8	1	5
S-122	11/16	13/8	1	8
S-124	3/4	13/8	1	14
S-125	25_{32}	13/8	1	14
S-126	13/16	$1\frac{1}{2}$	2	
S-128	7/8	15/16	2	4
S-130	15/16	15/16	2	12
S-132	1	15/16	2 2 3 3	3
S-134	$1\frac{1}{16}$	$1\frac{5}{16}$ $1\frac{5}{16}$ $1\frac{5}{16}$ $1\frac{5}{16}$ $1\frac{7}{8}$ $1\frac{7}{8}$	3	3 3 8
S-136	11/8	17/8	4	
S-140	11/4	1 1 1/8	5	4
	8-Poi	nt Sockets		/
0.010	9./	21/		19

S-212	3/8	31/32		12
S-214	7/16	31/32		15
S-216	1/2	31/32	1	2
S-218	9/16	31/32	1	4
S-220	5/8	31/32	1	4

[‡]Special 6-point for Ford Conn. Rod Nuts

Extra Deep Socket and Spark Plug Wrenches

1/2" Square Drive—Thin Straight Walls Hot Forged from Chrome Molybdenum Steel

Number	Openings	Length	Weight l Lbs.	Per Doz. Ozs.
DS-18	9/16	3	3	6
DS-20	5/8	3	3	6
DS-22	11/16	3	3	8
DS-24	3/4	3	4	1
DS-26	13/16	3	4	1
DS-28	7/8	$3\frac{1}{4}$	4	14
*DS-28B	57/64	31/4	3	12
DS-30	15/16	$3\frac{1}{4}$	5	4
DS-32	1	$3\frac{1}{4}$	5	7
DS-36	11/8	31/4	8	1

^{*}Extra thin for Buick.

Spark Plug Wrench Set No. DS-71/2

Contains one each DS-26, DS-28, DS-28B, DS-30, DS-32, DS-36, DSH-6 T Handle. In metal box. Weight 3\% 1bs.



New Improved Standard Series Van-Chrome Reversible Ratchets

 $1\!\!/2''$ Square Drive Drop Forged from Chrome Molybdenum Steel

The two sizes of Standard Ratchets now offered by Herbrand in the Standard ½" Drive Series provide the mechanic a complement of sizes and lengths for the highest efficiency in service work. The professional mechanic will appreciate the importance of having both Ratchets because each serves a definite purpose for modern speed tool usage. Both are the new, improved mechanism and are immediately reversible with a simple thumb control button for speed, precision and accuracy. Engineered to function in the smallest working radius.

New Reversible Ratchet No. S-10

Operates either right or left and is geared with 28 teeth to work readily in the 28th part of a circle. All parts are accurately machined, hardened and tempered for long wearing qualities. Positively cannot change working position without operating the control button. Each Ratchet is individually bench-tested and is the finest that money can buy at any price. Chrome plated and polished.

Length 10". Weight 1 lb.

Extra Long Reversible Ratchet No. S-11

Mechanically, this Ratchet is the same as S-10 and the other New Herbrand Ratchets. It has the same predominating features and is designed and balanced for extra length where extra leverage is required. Chrome plated and polished.

Length 15". Weight 3 lbs.

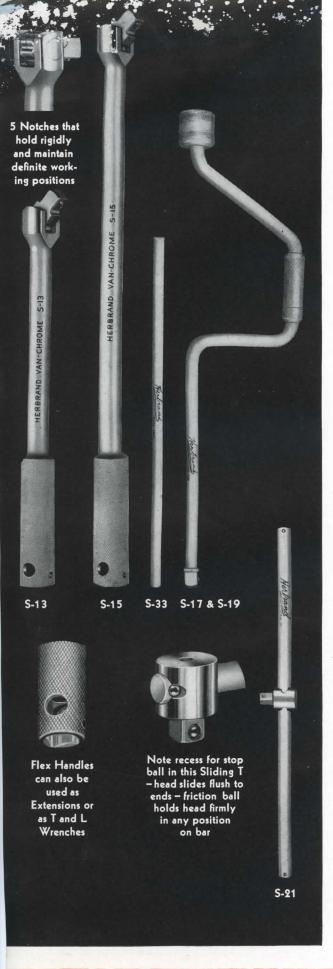
Outstanding Features of the New and Simplified Van-Chrome Ratchets

(1) Instantly reversible, (2) New, easy operating push button control, (3) Ratchets in shortest radius, (4) No lost motion, (5) Holds securely in any position, (6) Smoothest running Ratchet made, (7) Will not drag or back off nut, (8) Fewer working parts, (9) All Alloy Steel—Heat treated, (10) Sealed to keep out dirt and grit, (11) Perfectly balanced, (12) Passes rigid government test.

Refer to pages 8 and 9 for a complete listing of 1/2'' Drive Handles and Attachments







Standard Series Handles and Attachments

1/2" Square Drive—Extra Strong and Rigid

Drop Forged from Chrome Molybdenum Steel

These versatile Herbrand Socket Handles and Attachments are better designed to make any combinations desired. They are lighter in weight than the ordinary types, increase efficiency, eliminate bulk and clumsiness, get into those tough spots and are easier to handle. One-piece forging and scientific heat treatment impart rigidity and power. Chrome plated and polished.

Sureset Flex Handles

Definitely distinctive improvements to Herbrand's Nationally Popular Flex Handles make them better, stronger and more useful than ever. The hinged socket receiving end is drop forged and machined with 5 notches held by a friction ball to hold firmly at any desired angle; the friction ball seats in the notches for more rigidity and maintains a definite working position. The entire tool is drop forged and produced by the drawn out and rolling method which refines the steel and imparts extra strength. Designed with larger fork, more body and longer knurled handle for a full hand grip. The handle is cross-drilled for use with T bar No. S-33 and has a ½" square drive forged opening for connection with other ½" drive units. Chrome plated and polished.

- S-13 FLEXIBLE OFFSET HANDLE. Length 12". Weight 1 lb. 10 ozs.
- S-15 LONG FLEXIBLE OFFSET HANDLE. A flex handle, a swivel handle, a T handle, an offset wrench and a nut spinner—all in one. Has all the exclusive features above described. 18" long. Weight 1\% lbs.
- S-17 SHORT SPEEDER HANDLE. Forged solid and specially designed for maximum clearance and leverage. Knurled revolving grips. 15" long. Weight 1 lb. 7 ozs.
- S-19 LONG SPEEDER HANDLE. Forged solid and designed to deliver the utmost in speed and efficiency. Knurled revolving grips. 17" long. Weight 1 lb. 10 ozs.
- S-21 SLIDING T HANDLE. The forged head slides flush to either end and is firmly held at any point on the bar by a friction ball. Length 11". Weight 12 ozs.
- S-33 T HANDLE BAR. Used to form T Handle with all Herbrand attachments which are cross drilled for this service. 11" long. Weight 5 ozs.



Standard Series Handles and Attachments

1/2" Square Drive—Extra Strong and Rigid Drop Forged from Chrome Molybdenum Steel

All "Van-Chrome" Handles and Attachments are equipped with Herbrand's well-known and distinctive lock-on feature. This is your assurance that the sockets "stay put"—no chance of them dropping off to cause grief and loss of time. The forged offset shoulder on the connection ends is a positive socket stop and provides automatic engagement of the locking ball which releases readily on a straight pull without the use of any special gadgets.

Finished in lustrous Chromium plate, the ends and faces are polished brightly. This finish is rust resisting and will retain its lustre. All "Van-Chrome" Sockets and Handles are fully guaranteed.

Forged Extensions

All Herbrand Standard Extensions are forged solid with ½" square drive opening in the heads for use with other attachments. Drilled to engage T bar No. S-33, they also have retaining holes for positive lock-on to all units. The drive ends have a forged shoulder which acts as a positive socket stop and are equipped with lock-on ball to keep the sockets from working loose or falling off.

- S-27 EXTENSION, 5" long. Weight 6 ozs.
- S-28 EXTENSION, 10" long. Weight 12 ozs.
- S-35 UNIVERSAL JOINT. Extremely compact. New design. Short coupled. Breaks over to a full 90° angle for positive locking. Reaches into tight places where other universals fail. Weight 4 ozs.
- S-37 DRAG LINK SOCKET, 3/4" Blade.
- S-39 DRAG LINK SOCKET, 1" Blade.

Socket Adaptors

These Adaptors increase the range of the handles and permit the use of sockets of one series with handles of another series.

A-390 3/8" male, 1/2" female.

A-391 1/2" male, 3/8" female.

A-393 1/2" male, 3/4" female,





Standard Series Van-Chrome Socket Sets

1/2" Square Drive

Mechanics Popular Assortments

Here are set combinations containing the latest *Hot Forged* Sockets and speedier, better designed Handles. The heavy gauge metal boxes will last a lifetime and there is ample space for additional tools.

Standard Socket Assortment No. SA-70-17 Pieces

A popular assortment of 17 Hot Forged Sockets with 12-point openings and extra thin straight side walls.

Contents: 17 "Van-Chrome" Sockets Nos. S-112, 3/6"; S-114, 5/6"; S-116, 1/2"; S-118, 1/6"; S-119, 1/3/2"; S-120, 5/6"; S-121, 2/3/2"; S-122, 11/6"; S-124, 3/4"; S-125, 2/3/2"; S-126, 1/3/6"; S-130, 1/3/6"; S-132, 1"; S-134, 1/1/6"; S-136, 1/3/6"; S-140, 1/3/4".

SET No. SA-70, in fibre box. Weight 2 lbs. 8 ozs.

Standard Flex Set No. SA-711/2-12 Pieces

This Set carries No. S-13 Flexible Handle and T Bar S-33, and ten selected "Van-Chrome" Sockets.

Contents: 10 "Van-Chrome" 12-point Sockets Nos. S-114, $\frac{7}{16}$ "; S-116, $\frac{1}{2}$ "; S-118, $\frac{9}{16}$ "; S-120, $\frac{5}{8}$ "; S-121, $\frac{21}{32}$ "; S-122, $\frac{11}{16}$ "; S-124, $\frac{3}{4}$ "; S-126, $\frac{13}{16}$ "; S-128, $\frac{7}{8}$ "; S-130, $\frac{15}{16}$ ". Flexible Offset Handle No. S-13 and T Handle Bar S-33.

SET No. SA-71½ in metal box. Weight 4 lbs. 6 ozs.

Standard Flex Set No. SA-73½—18 Pieces

This popular set carries the extra long 18" Flexible Handle S-15 and the T Bar S-33. Also 16 Hot Forged 12-point Sockets with openings from $\frac{3}{8}$ " to $1\frac{1}{8}$ ".

Contents: 16 "Van-Chrome" Sockets Nos. S-112, $\frac{3}{8}$ "; S-114, $\frac{7}{16}$ "; S-116, $\frac{1}{2}$ "; S-118, $\frac{4}{16}$ "; S-119, $\frac{19}{32}$ "; S-120, $\frac{5}{8}$ "; S-121, $\frac{21}{32}$ "; S-122, $\frac{11}{16}$ "; S-124, $\frac{3}{4}$ "; S-125, $\frac{25}{32}$ "; S-126, $\frac{13}{16}$ "; S-128, $\frac{7}{8}$ "; S-130, $\frac{15}{16}$ "; S-132, 1"; S-134, $\frac{11}{16}$ "; S-136, $\frac{11}{8}$ ". 18″ Flexible Offset Handle S-15 and T Bar S-33.

SET No. SA-73½, in metal box. Weight 6 lbs.

Standard Socket Set No. SA-721/2—16 Pieces

An assortment that comprises 10 of the most popular sizes of *Hot Forged* Sockets and 6 lightweight Handle Units. It meets the needs of most mechanics and there is ample room in the substantial metal box for additional Sockets and Handles.

Contents: 10 "Van-Chrome" 12-point Sockets Nos. S-114, $\frac{7}{16}$ "; S-116, $\frac{1}{2}$ "; S-118, $\frac{4}{16}$ "; S-120, $\frac{5}{8}$ "; S-121, $\frac{21}{32}$ "; S-122, $\frac{11}{16}$ "; S-124 $\frac{3}{4}$ "; S-125, $\frac{25}{32}$ "; S-126, $\frac{13}{16}$ "; S-128, $\frac{7}{8}$ ". Reversible Ratchet No. S-10 New Improved Design. Speed Handle No. S-17; Sliding T Handle No. S-21; Extension 5" long No. S-27; Extension 10" long No. S-28 and Universal Joint No. S-35.

SET No. SA-72, in fibre box. Weight 6 lbs. 6 ozs.

SET No. SA-721/2, in metal box. Weight 11 lbs. 8 ozs.



Heavy Duty Series Sockets

3/4" Square Drive—Thin Straight Walls

Hot Forged from Chrome Molybdenum Steel

Engineered and designed to perform the most strenuous work on large diameter nuts where extra strength and safety are vital. Unnecessary bulk, weight and clumsiness are eliminated. Equipped with a safety snap, lock-on feature. Heat treated for brute strength. Chrome plated, polished walls.

12-Point Sockets

Number	Openings	Height	Wt. Pe	er Doz. Ozs
H-128	7/8	17/8	3	12
H-130	15/16	1 7%	4	2
H-132	1 10	$\frac{17/8}{115/16}$	4	5
H-134	11/16	2	4	8
H-136	1 1/8	$2\frac{1}{16}$	5	1
H-138A	13/16	$\frac{115}{16}$	5	4
H-140	11/4	23/16	5	10
H-142	15/16	21/4	6	6
H-144	13/8	$2\frac{1}{4}$ $2\frac{5}{16}$	6	15
H-146	17/16	23/8	8	7
H-148	1 1/2	$\frac{27}{16}$	8	7
H-152	15/8	$\frac{21_{0}}{21_{2}}$	11	13
H-156	13/4	25/8	12	
	113/16	23/	12	12
H-158	1 7/16	$\frac{2\frac{3}{4}}{2\frac{7}{8}}$	18	12
H-160	17/8	31/8	22	8
H-164	2	078	44	0

Heavy Duty Handles

3/4" Square Drive—Extra Strong and Rigid

- H-11 NEW REVERSIBLE RATCHET HANDLE. Features the latest improved mechanism used in all Herbrand Reversible Ratchets. Rugged, yet with slender lines, it concentrates tremendous power at the ratchet end for safely breaking loose the most stubborn and corroded nuts. Assures maximum speed. Reversible in action it works from a full turn to \(\frac{1}{36}\)th of a circle. Length 21". Weight 5 lbs.
- H-15 FLEXIBLE OFFSET HANDLE. Surplus power, distinctive advantages of working efficiency and more speed are featured. A friction spring plunger holds the hinged drive at any angle desired. The knurled handle is cross drilled for insertion of the spinning T Bar No. H-33 which is sold as a unit with the handle. 21" long. Weight 3 lbs. 13 ozs.
- H-21 SLIDING T HANDLE. The forged head slides flush to the ends for use as an offset wrench and a friction ball holds the head firmly at any point. 20" long. Weight 2 lbs. 10 ozs.

Heavy Duty Extensions

All Extensions are forged solid. The ¾" heads are equipped with a retaining hole for positive locking to the Handles. The opposite ends are forged with an offset shoulder which provides a positive socket stop.

- H-25 EXTENSION, 4" long. Weight 10 ozs.
- H-29 EXTENSION, 8" long. Weight 1 lb. 3 ozs.
- H-31 EXTENSION, 16" long. Weight 2 lbs. 4 ozs.
- H-33 T HANDLE BAR, 20" long. Weight 15 ozs.

Refer to page 12 for Heavy Duty 3/4" Drive Socket Sets



Heavy Duty Series Van-Chrome Socket Sets

3/4" Square Drive Chrome Molybdenum Steel



Heavy Duty Socket Set No. HA-801/2

Contents, total of 14 pieces: 11 "Van-Chrome" Heavy Duty Sockets Nos. H-128, %"; H-130, $^{15}\!\!/_{6}$ "; H-132, 1"; H-134, $^{11}\!\!/_{6}$ "; H-136, $^{11}\!\!/_{8}$ "; H-138A, $^{11}\!\!/_{6}$ "; H-140, $^{11}\!\!/_{4}$ "; H-144, $^{11}\!\!/_{8}$ "; H-146, $^{11}\!\!/_{6}$ "; H-148, $^{11}\!\!/_{2}$ "; H-152, $^{15}\!\!/_{8}$ ". Sliding T Handle No. H-21. Extensions No. H-29 and No. H-31.

SET No. HA-80, in fibre box. Weight 11 lbs.

SET No. HA-80½, in metal box. Weight 16 lbs.



Heavy Duty Socket Set No. HA-821/2

Contents, total of 22 pieces: 16 "Van-Chrome" Heavy Duty Sockets with 12-point openings Nos. H-128, %"; H-130, $^{1}\%_{6}$ "; H-132, 1"; H-134, $^{1}\%_{6}$ "; H-136, $^{1}\%_{6}$ "; H-138A, $^{1}\%_{6}$ "; H-140, $^{1}\%_{6}$ "; H-142, $^{1}\%_{6}$ "; H-144, $^{1}\%_{6}$ "; H-148, $^{1}\%_{6}$ "; H-152, $^{1}\%_{6}$ "; H-156, $^{1}\%_{6}$ "; H-158, $^{1}\%_{6}$ "; H-160, $^{1}\%_{6}$ ", and H-164, 2". 6 Heavy Duty Handles: Ratchet No. H-11; Flex Handle No. H-15 and Spinning T Bar H-33; Sliding T Handle No. H-21 and 2 Extensions Nos. H-29, 8" long and H-31, 16".

SET No. HA-82, in fibre box. Weight 28 lbs.

SET No. HA-821/2, in metal box. Weight 36 lbs.

Every thoroughly equipped mechanic needs a complete set of "Van-Chrome" Heavy Duty Sockets. These large diameter sockets have many applications and are essential for truck, bus, tractor and industrial work. They are also needed for work on farm and power machinery, road building equipment and all heavy machinery units.

The "Van-Chrome" Heavy Duty Socket line insures faster and easier work because it is designed for maximum handling efficiency. All unnecessary weight and clumsiness have been dispensed with. The sockets have straight walls and even though very thin they can be depended upon to give uninterrupted service under the most strenuous conditions. These 12-point sockets cannot slip from the handle end because they are equipped with a lock-on feature which securely holds them in place.

Sockets and Handle Attachments are *Hot Forged* from a special analysis Chrome Molybdenum Steel and are heat treated all the way through. Handsomely finished in Herbrand's lustrous triple nickel plate with highly buffed side walls.

The tool boxes are constructed of heavy gauge steel, finished in durable baked blue wrinkle, and fitted with carrying handle and locking clasps.



The Magic Tool Chest MC-5 and The DeLuxe Rollway MB-5

Easy Gliding Spillproof Drawers-Disappearing, Sliding Front Panel

Solid Welded Construction

Extra Large Chest MC-5 contains seven drawers of various depths and sizes for grouping and quick selection of tools. Two shallow, felt-lined drawers are ideal for precision instruments. The patented, easygliding drawers operate on compound slides, avoid binding and provide a spill-proof stop. The top of the chest nests a handy tote tray, $18\frac{5}{8}$ " x 8" x $1\frac{3}{4}$ ", which is sub-divided to keep tools in order. The Chest fits snugly on top of the Rollway MB-5 and has two drop handles for removal when used as a workbench.

Rollway No. MB-5 has three extra large size drawers which glide easily on strong compound slides even when loaded with heavy duty tools. The platform shelf below the drawers accommodates large pullers, bars, etc. The sliding front panel disappears when open but conceals and locks the tool drawers securely when closed. Fitted with easy-running, ball bearing, swivel casters; a handle for moving from job to job; and a removable valve stem tray.



Closed View



Chest or Rollway may be purchased separately or as a unit. Individual tools are not included. Mechanics and jobbers may make their own selections from the large assortment of tools listed in this catalog.

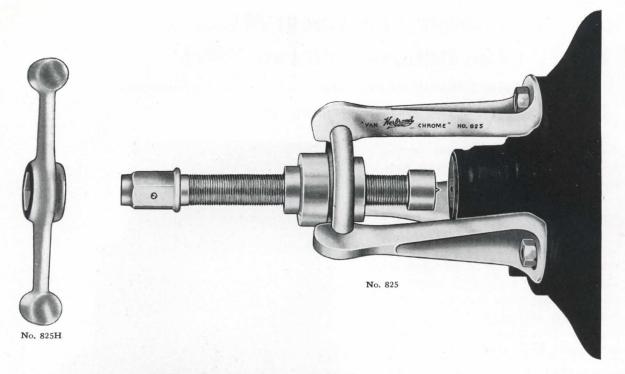
No. MC-5 Chest

26" long, 12" deep, 14¾" high. Net weight 61 lbs. Finished in baked blue wrinkle enamel.

No. MB-5 Rollway

27½" wide x 18½" deep x 31" high. Net weight 85 lbs. Baked blue wrinkle enamel finish.





Van-Chrome No. 825 Universal Wheel Hub Puller

Capacity for Most Cars—Fits All Bolt Circles

Solid Drop Forged Hub—Drop Forged Chrome Alloy Pulling Arms

The sliding arms are readily adjustable and quickly adapted to any hub regardless of the number of wheel stude used and where the bolt circle does not exceed $7\frac{1}{2}$ ". Exerts a direct and tremendous pull. Only Herbrand provides the Universal Wheel Puller with the sliding bearing and the floating cap.

No. 825, Wheel Hub Puller only, not including the handle. Expansion $7\frac{1}{2}$ ". Weight 9 lbs. 10 ozs. Satin nickel.

No. 825C, Wheel Hub Puller No. 825 and Puller Handle No. 825H. Weight 11 lbs. 10 ozs. Satin nickel.

No. 825-5, Drop Forged Alloy Steel Replacement Puller Arms for No. 825. Satin nickel finish.

Drive Handle No. 825H for Hub Wheel Puller

Notched for Lock-On Feature

Drop Forged and Heat Treated

For use with Puller 825. Fits any puller with a $1\frac{1}{8}$ " hex head. Satin nickel. Length 8". Weight 2 lbs.

The revolutionary features embodied in this Puller give the highest degree of accuracy, tremendous power and range, a straight pull that will not bend or distort wheel lugs, a sliding bearing in which the driving screw rides and a floating cap on the screw end. The sturdy alloy steel screw works in a sliding bearing so that when it is necessary to bump the end of the screw it positively cannot injure the threads.

Another unique feature, not found on other pullers, is the floating cap on the screw end which centers on the axle and avoids injury to axle or screw.

These distinctive Herbrand features improve the tool so remarkably that it is immediately obvious to the mechanic that no injury can be transmitted to any of the inner parts of the wheel, axle or differential. The simplest puller made, yet covering the widest range of service without the use of trick attachments.



Stubborn, hard to budge studs quickly respond to the unfailing power of the Herbrand Stud Removing Tool. New—modern—improved and scientifically engineered to take a positive biting grip on studs and remove them with little effort, without the hazard of slipping. Close to the dash rear studs are easy because it is compact and ingeniously designed for the tough jobs which other removers cannot handle.

The special analysis Chrome Alloy Steel, from which this improved Stud Remover is made, permits lighter weight, smaller size and greater strength. This important feature allows the tool to operate closer to the work giving better balanced leverage and eliminating the danger of snapping off the studs.

Another outstanding characteristic is the increased capacity providing for a range of stud sizes from ½" up to ¾" inclusive. The self-adjusting, eccentric roller forms a wedging action against the stud and has deep, precision cut teeth which no stud can resist. The teeth take a firm grip without distorting the studs.

Still another salient factor is the driving stud on top of the tool. This carries a $\frac{1}{2}$ " square drive service connection for use with any ratchet handle, flex handle, or standard socket unit.



Van-Chrome Eccentric Stud Puller No. 820

Ratchet Action—Capacity 1/4" to 3/4"

Made from Chrome Alloy Steel

This compact tool handles all studs from ½" to ¾", covering a range of service including all passenger cars and practically all trucks. Improved engineering and the use of quality steel eliminate bulk and clumsiness, permitting it to engage and remove studs which are inaccessible to other tools. It operates on the gear principle for gripping, develops tremendous power, cannot slip and will not lock on the job. The self-adjusting, eccentric roller sets flush with the housing of the tool and has deep, precision cut teeth to service studs that have been twisted off close to the block.

Has $\frac{1}{2}$ " square drive service connection for use with any ratchet handle, flex handle, or standard socket unit. Nickel plated and polished.

Height 29/16". Weight 1 lb. Packed 4 to a box.



Set No. XX-10



Set No. XX-5





Screw and Stud Extractor Sets

Straight Flutes—No Taper

A New, Positive Method of Screw Extraction. Saves Dismantling, Shutdowns and Costly Delays

These Straight Fluted Extractors provide the only safe and efficient means of removing broken threaded ends of studs and screws that are deep below the surface and positively eliminate dismantling motors, machinery or parts to expose stud ends. Operation:

- 1. Drop proper size centering drill guide in stud hole—insert drill and drill clear through broken off screw bolt or stud.
- 2. Insert enlarging drill and drill stud or bolt to a thin shell.
- 3. Drive in extractor and turn out broken ends.

Set No. XX-10 for Screws of Diameters $\frac{1}{4}$ " to $\frac{1}{2}$ " Inclusive

A popular assortment of standard length Extractors, Drills and Guides for $\frac{1}{4}$ " to $\frac{1}{2}$ " screws or studs, suitable for depth extraction up to 1". Contents: 5 Extractors, Nos. 1E to 5E inclusive with screw diameters $\frac{1}{4}$ ", $\frac{5}{16}$ ", $\frac{3}{8}$ ", $\frac{7}{16}$ ", $\frac{1}{2}$ " and $\frac{9}{16}$ ". 5 Special Centering Drills. 10 Drill Guides and an Extractor Wrench. Total of 21 pieces.

Weight 21/4 lbs. In die cast metal box.

Extractor Set No. XX-5

SET No. XX-5, 1 each of Extractors Nos. 1E, 2E, 3E, 4E and 5E. Screw diameters $\frac{1}{4}$ ", $\frac{5}{16}$ ", $\frac{3}{8}$ ", $\frac{7}{16}$ ", $\frac{1}{2}$ " and $\frac{9}{16}$ ". Weight 6 ozs. In leatherette case.

Jobbers Note: Screw and Stud Extractors listed on this page are not subject to the Regular Discount. Refer to Price Schedule

When screws and studs break off they invariably leave the end below the surface where they must be drilled out to a thin shell for safe and easy removal. Blind center punching, drilling and the use of obsolete spiral or tapered removers usually result in breakage, failure and costly delays.

Revolutionizing old methods of screw and stud extraction these Straight Fluted Extractors obsolete the old tapered type. They are the only extractors that positively engage broken threaded ends their entire length. When inserted they key themselves into the shell, work like an internal socket wrench and cannot turn into, or out of, the broken ends. There is no damaging of costly parts or threads, no wedging, no reaming or shell spreading and no failures. The straight fluted principle eliminates all guess work and hazards because guides are used for accurate centering at depths. Drill clear through a broken off screw, bolt or stud end, drive in a Straight Fluted Extractor and turn it out easily and safely.



Van-Chrome Open End Adjustable Wrenches

Thin—Strong—Perfectly Balanced
Drop Forged from Chrome Alloy Steel

Extra thin and extra strong, these New Adjustable Wrenches have a full, deep throat straight back to the frame which gives a greater bearing and a full bite on both square and hex nuts—no slipping or "knuckle busting." The movable jaw has a wide bearing surface.

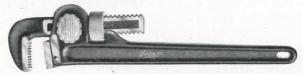
The tapered jaws are perfectly matched and so thin that they reach places inaccessible to ordinary wrenches, but are so strong that they withstand breaking tests that most wrenches of this type cannot meet.

The free-riding jaw adjusts instantly by a turn of the easy-running knurl screw, which has four tempered threads accurately meshed in the forged jaw to hold any adjustment firmly and allow greater pressure on the handle without slipping. The handle is graduated to a wider end to fit the hand in a natural gripping position and imparts perfect balance.

Hardened in oil. Chrome plated, heads polished.

Catalog Number	Length	Capacity	Weight Lbs.	Per Doz. Ozs.
21-4	4	1/2	1	14
21-6	6	$\frac{3}{4}$	3	
21-8	8	15/16	8	
21-10	10	11/8	11	4
21-12	12	17/16	19	8

Individually boxed.



Super-Strength Pipe Wrenches

Drop Forged Alloy Jaws-Alloy Steel Beam

The superior design of the Herbrand Pipe Wrench makes it far more efficient to handle than the conventional Stillson pattern. The non-breakable, open housing with free riding adjusting nut is quickly appreciated by mechanics. The jaws are drop forged from Chrome Molybdenum Steel and carefully oil hardened. They will grip and hold perfectly under the stiffest pull and will not lock on the pipe. The alloy handle of I-Beam design fits the hand. Black enamel.

Length Inches	Jaw Opening	Weigh Lbs.	t Each Ozs.
		Lus.	UZS.
6	11/8		7
8	15/8		14
10	21/8	1	10
12	$2\frac{1}{2}$	2	14
14	3	3	1
18	$3\frac{1}{2}$	4	11
24	41/4	7	7
36	$5\frac{1}{2}$	13	12

Jobbers Note: Open End Adjustable Wrenches are not subject to Standard Discount. See Discount Schedule







Original Van-Chrome Multigrip Pliers

4 Sizes—For Water Pump, General Service and Electrical Work

Drop Forged from Chrome Vanadium Steel

Herbrand created the Multigrip Plier Family to equip the mechanic completely for a wide range of service. Their thin jaws and unique construction make it easy to reach into inaccessible quarters. The precisely machined extra deep teeth and positive bull-dog grip permit either the fine close adjustment or the strong, hard pull. All Multigrips are fitted with an Alloy Steel bolt and nut. Chrome plated with polished heads.

Multigrip Water Pump General Service Pliers

No. $166\frac{1}{2}$, 6 adjustments. Range 0" to $1\frac{5}{8}$ ". Length $9\frac{3}{4}$ ". Weight 12 ozs. 6 to the box.

No. 166 has 4 slip joints. Range $\frac{3}{8}$ " to $\frac{15}{8}$ ". Length $9\frac{1}{2}$ ". Weight 8 ozs. 6 to the box.

Multigrip Junior No. 168

Unmatched as a general utility plier. Made in a convenient $7\frac{1}{2}$ " length, it has the range of jaw opening to fit the popular sizes of S.A.E. nuts. Replaces the conventional type pliers.

No. 168, 4 adjustments. Range 0" to $\frac{3}{4}$ ". Length $7\frac{1}{2}$ ". Weight $4\frac{1}{2}$ ozs. 6 to the box.

Multigrip Midget Plier

Little giants of capacity and utility. Only $4\frac{1}{2}$ " long, yet strong and thin enough to reach the smallest, most awkwardly placed nuts on motor, distributor, generator, magneto, dash panel, radio, switchboard—in fact all elusive nuts.

No. 167, 4 adjustments. Range 0" to $\frac{7}{16}$ ". Length $4\frac{1}{2}$ ". Weight 2 ozs. 12 to the box.

No. 1671/2 temporarily discontinued.

Multigrip Plier Set No. M-3

One each Nos. 167, 168 and 166½. Complete in leatherette case. Weight 1 lb. 4 ozs.

Service Station Utility Kit No. M-4

This 3-pocket genuine cowhide leather holster carries plier No. 168, No. 310, 2" blade Screw Driver and No. 312, 3" blade Driver with insulated handle—the most necessary tools around any service station. Holster is designed with slits to slip through the operator's belt.

Complete in leather holster. Weight 12 ozs.

Van-Chrome Battery Service Tools

Approved by Battery Experts

Battery Terminal Lifter and Scraper No. 177 Drop Forged from Chrome Vanadium Steel

Battery experts acclaim the patented battery terminal lifter and scraper No. 177 the most efficient for removing terminals and cleaning the connections. Under its powerful leverage, badly frozen or corroded battery terminals snap up easily without marring, cracking, or loosening the plates or injuring the tops of the cells. A special release joint dismembers the plier, providing one section with a serrated nose for cleaning terminals and the other with sharp jaws for scraping posts.

Chrome plated with bright polished heads. Length $10\frac{1}{2}$ ". Weight $13\frac{1}{2}$ ozs. 6 to box.

Battery Plier No. 179 Drop Forged from Chrome Molybdenum Steel

This outstanding battery plier of original Herbrand design provides more speed, ease and efficiency. The gripping jaws are serrated to take positive hold of battery terminal nuts even though badly corroded or mutilated. The special 30° angle heads make all terminal nuts easily accessible regardless of position of the battery. The nose is tapered both sides to clear filler caps. The long handles are shaped to fit the natural grip of the hand.

Chrome plated with head polished. Range $\frac{5}{32}$ " to 1". Length 8". Weight 7 ozs.

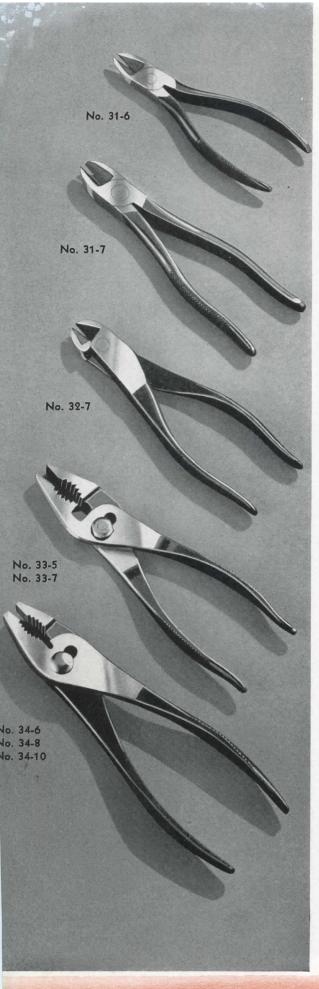
Battery and Starter Nut Wrench No. 276 Drop Forged from Select Tool Steel

The 12-point openings $\%_{16}$ " and $5'_8$ " are machined in specially designed heads. One end for the starter nut, the other end is extra thin to firmly grip the terminal nut. Satin nickel, heads polished. Length 6". Weight $2\frac{1}{2}$ ozs.

Battery Service Set No. B-3

Comprises the popular patented Battery Terminal Lifter and Scraper No. 177, the No. 179 Battery Plier and No. 276 Battery Wrench. Complete in 3 pocket leatherette roll.





Van-Chrome Mechanics' Pliers

A Size and Type for Every Need

Drop Forged from Special Chrome Alloy Steels

Dependable, well-designed pliers are the most important tools in the mechanics kit. Basically, the selection of the steel used together with exactingly controlled heat treatment, tempering, fitting and expert construction produces the highest type of precision pliers available. "Van-Chrome" Pliers are designed and built for the mechanic. They are drop forged from special analysis Chrome Alloy Steels, each one carefully selected so that the Alloy used is best suited for each particular type of plier and its uses. Exceptionally long life, remarkable strength and durability are imparted because they are scientifically heat treated and tempered—through and through to the very heart of the metal—by positively controlled processes.

6" Diagonal Cutters No. 31-6

There's real cutting power in these lightweight Diagonals. Drop forged from special Nickel Molybdenum Steel—thin, narrow, hand-honed jaws to work easily in close quarters—especially handy for ignition and electrical work. Weight per dozen 3 lbs. 12 ozs.

7" Diagonal Cutters No. 31-7

A moderately priced cutter of dependable quality—designed for great leverage—a handy cotter pin puller—mated, handedged cutting blades that will cut clean and stand up—tapered nose for maximum clearance. Drop forged from Nickel Molybdenum Steel. Weight per dozen 7 lbs.

7" Giant Diagonal Cutters No. 32-7

Extra high leverage—heavy duty construction for power and long life—full-fashioned long handles for easy cutting—drop forged from Nickel Molybdenum Steel—hand-honed, matched cutters. Weight per dozen 6½ lbs.

Cutting and Gripping Pliers—Adjustable Joint

Two tools in one—an all-around Plier that combines sturdy gripping power and an excellent Side Cutter for general purpose work. Slender jaws with two-position slip joint—head rivet flush on one side. Drop forged from Chrome Vanadium Alloy Steel. Keen, sharp cutting edges are handhoned for durability. Available in two sizes.

No. 33-5. Length 51/2". Weight per doz. 3 lbs. No. 33-7. Length 7". Weight per dozen 6 lbs.

Heavy Duty Combination Pliers Adjustable Joint - Wire Cutters

General-use Pliers of unusual strength—designed for heavy duty work that ordinary pliers can't handle. Featuring the notch type wire cutters that pass at any angle and give a clean cut. Thin jaws—bow handles for powerful leverage. Drop forged from Chrome Vanadium Alloy Steel. Available in the three popular lengths.

No. 34-6, Length 6". Weight per doz. 6¾ lbs. No. 34-8, Length 8". Weight per doz. 9 lbs. No. 34-10, Length 10". Weight per doz. 11¼ lbs.

Jobbers Note: Pliers Listed on pages 20 to 21 are not subject to the Standard Discount. Refer to Discount Schedule



Van-Chrome Mechanics' Pliers

(Continued)

Built to the highest standards, they are perfectly balanced and accurately mated with smooth, easy-riding joints. The sharp, deeply milled teeth will not mushroom, giving the plier the utmost gripping or cutting power with a minimum of pressure on the handles. Each "Van-Chrome" Plier is individually bench-tested and inspected to insure delivery of only perfect tools.

The Cutting Pliers have perfectly aligned blades that are hand-filed and honed to retain their true, sharp cutting edges. The full-fashioned handles are knurled for a comfortable, non-slip grip. Finished in rustproof gunmetal with bright heads. Individually boxed

No. 35-7 Angle Nose Pliers Adjustable Joint - Thin Jaws

The thin head of this Powerful Gripping Plier is set at a 45° angle to reach and turn objects that are inaccessible to conventional pliers. The teeth are milled and set as in a stillson wrench and will not slip on round rods, pipe or irregular shapes. The three-position adjustable slide-joints increase the range of service to fit a wide variety of popular sizes. Drop forged from Nickel Molybdenum Alloy Steel—heat treated and tempered throughout. Length 7". Weight per dozen 4 lbs. 8 ozs.

No. 36-7 Long Reach Thin Nose Pliers Adjustable Joint - Wire Cutters

This plier has many practical uses because the extra long, thin jaws are flat for accessibility and are mated to remain parallel on two adjustments. The jaws have three types of milled teeth to fit square or hex nuts and provide an exceptionally broad range of usefulness. Notch type wire cutters. Drop forged from Chrome Vanadium Steel. Length 7". Weight per dozen 5 lbs. 6 ozs.

No. 37-6 Long Needle Nose Pliers With Side Cutters

Used by mechanics in practically all trades, these Long Needle Nose Pliers are essential for ignition, electrical, telephone, radio and all work that demands an extra long reachespecially handy on fine and delicate jobs. Equipped with powerful, hand-honed cutters. Finely balanced with spring tempered long nose and handles. Drop forged from Nickel Molybdenum Alloy Steel. Length 6". Weight per dozen 3 lbs.

No. 37-7 Long Needle Nose Pliers

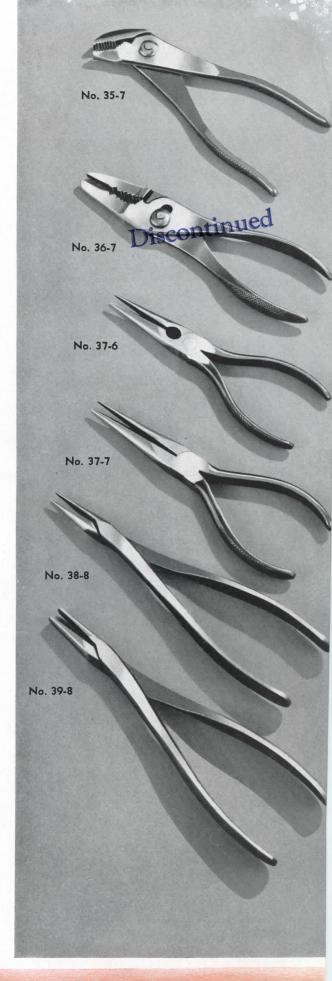
This Plier is the same as No. 37-6 described above, but is longer and heavier and has no side cutter. Finely balanced for delicate work. Length 7". Weight per dozen 3 lbs. 12 ozs.

No. 38-8 Long Reach Chain-Nose Wiring Plier

Thin, pointed jaws that reach into the most confined places where fingers and the other pliers can't go. The extra long leverage handles give unusual gripping ability. A Generaluse Plier not only for automotive mechanics and electricians, but also for work on all small machines. Drop forged from Chrome Vanadium Steel. Has wide, smooth, spring tempered handles. Length 7¾". Weight per dozen 4½ lbs.

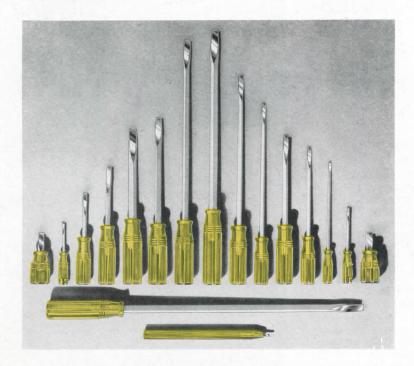
No. 39-8 Long Reach Duck-Bill Pliers

A similarly designed Plier with all the working advantages of No. 38-8 described above, but with duckbill jaws. Has wide, spring tempered, smooth handles. Length $7\frac{3}{4}$ ". Weight per dozen $5\frac{1}{4}$ lbs.









Van-Chrome Protectogrip Screw Drivers

Insulated Handles—Cross Forged Blades

Chrome Tungsten Steel Blades - Genuine Pyralin Breakproof Handles

Catalog No.	Length of Blade	Size Square Stock	Overall Length	Weight I Lbs.	Per Doz Ozs.
*309	5/8	1/8	85/8	1	8
310	2	1/8	41/8		9
311	2 3	1/8	51/8		12
311A	6	1/8	87/8	- N	12
312	3	3/16	$6\frac{1}{4}$	1	10
313	6	3/16	91/4	2	
314	9	3/16	$12\frac{1}{4}$	2	4
315	11/4	1/4	$3\frac{1}{2}$	2	
315A	4	1/4	8	2	8
316	6	1/4	10	3	6
317	10	1/4	14	4	2
318	11/4	5/16	$3\frac{1}{2}$	2	
319	7	5/16	11	4	8
320	12	5/16	$16\frac{1}{4}$	7	
321	6	3/8	$10\frac{1}{4}$	6	
322	12	3/8	$18\frac{1}{2}$	10	8
323	16	3/8	$22\frac{1}{2}$	12	

*Special Non-Conducting Screw Driver with 8" shockproof pyralin handle. See bottom illustration in cut. Packed six to the box. Numbers 310 and 311 are equipped with a pocket clip.

The transparent amber handles of the Herbrand Protectogrip Screw Drivers are perfect insulators against electricity and will stand eight thousand volts or more. They are just the right size to fit snugly into the palm of the hand and are designed to prevent slipping even in greasy hands. Protectogrip handles are machined from bars of pyralin which are carefully cured to provide indestructible qualities.

The solid one piece blades are cross-forged from special analysis Chrome Tungsten Steel and this special Herbrand forging process not only strengthens them but enhances their appearance. The tips are accurately sized to standard gauges, insuring a positive non-slip fit in screw slots. Only square stock is used in Protectogrip Drivers.

The X-ray illustrations above show how the shanks of the blades extend far into the handles to prevent any possibility of turning or becoming loose. The blades are heat treated to give maximum service and resiliency and will twist off the head of any screw they are made to fit. The Protectogrip is the toughest, strongest screw driver ever offered the automotive trade, and will stand surprising abuse and long wear. Blades are satin nickel plated and the tips are polished bright.



To conserve the mechanic's time and keep readily available the popular sizes of screw drivers used most frequently, Herbrand provides carefully selected assortments of the most sturdy and highest quality screw drivers in the industry.

Set No. SD-5

For electrical, ignition and radio service. Carries five slim, narrow shank drivers $\frac{1}{8}$ " and $\frac{3}{16}$ " square stock, with variation in blade lengths from 2" to 9".

Set No. SD-6

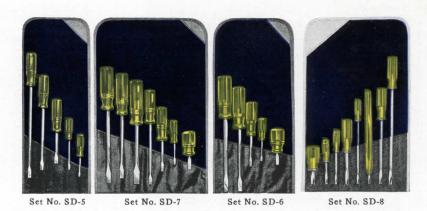
A well balanced assortment of five Drivers which are in daily need. Contains Nos. 310 and 312 for electrical and ignition work; No. 315, stubby type; Nos. 316 and 319 for general utility.

Set No. SD-7

A general service assortment of seven Protectogrip Drivers that fill an all purpose need. Includes Nos. 310, 312 and 313 for electrical and delicate adjusting work; the short, stubby driver No. 315; Nos. 316 and 319 for general purposes; the Heavy Duty Driver No. 321.

Set No. SD-8

A new assortment of Screw Drivers with small, square shanks which are particularly adapted to work on ignition, radio, electrical appliances and all tricky, delicate adjustments. Contains No. 309 Non-conducting Driver with 8" Pyralin Handle; No. 311A Extra Long ½" Blade Screw Driver; No. 310, 311, 312, 313, 314 and 315 Protectogrips with Chrome Tungsten Square blades and Shockproof handles.



Van-Chrome Protectogrip Screw Driver Sets

SET No. SD-5 contains 1 each of Nos. 310, 311, 312, 313, 314. In pocket leatherette case. Weight 11 ozs.

SET No. SD-6 contains 1 each of Nos. 310, 312, 315, 316, 319. In pocket leatherette roll. Weight 1 lb. 2 ozs.

SET No. SD-7 contains 1 each of Nos. 310, 312, 313, 315, 316, 319 and 321. In pocket leatherette roll. Weight 1 lb. 12 ozs.

SET No. SD-8 contains 1 each of Nos. 309, 310, 311, 311A, 312, 313, 314 and 315. In pocket leatherette kit. Weight 16 ozs.

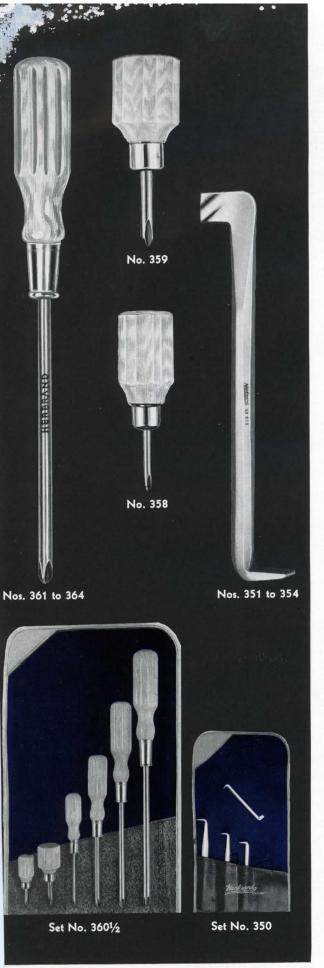
Protectogrip Screw Driver

Display
No. SD-12

The extra quality of these Protectogrip Screw Drivers is emphasized by this sales making display card. It holds 12 No. 310 Midget Screw Drivers and is die cut so the light X-rays the handles showing how deeply the blades are imbedded. Easel back.

Size $10\frac{1}{2}$ " x $13\frac{1}{4}$ ".





Phillips Screw Drivers

Hardwood Handles—Alloy Steel Blades
For Four-Point Recessed Heads—Self-Centering

Specially designed for faster driving and better holding power and to accurately fit the tapered four-point recesses in the heads of Phillips screws and bolts.

The bits center automatically in the screw heads and very little downward pressure is required to hold them firmly in place because the four-point contact produces three times the driving force of the conventional type.

These Drivers cannot slip, break off screw heads nor cause damage to rich upholstery fabrics, fine beaded mouldings and highly finished accessories.

High quality hardwood varnished handles with polished Chrome Alloy Steel blades and nickel plated ferrules.

Catalog No.	Fits Phillips Screws	Length of Blade	Overall Length	Weight P Lbs.	er Doz. Ozs.
358	No. 4 & smaller	1	3		12
359 361	5 to 9 inc. 4 & smaller	$\frac{11/_{2}}{3}$	$\frac{31_{2}}{61_{4}}$	1	
362 363	5 to 9 inc. 10 to 16 inc.	$\frac{4}{6}$	$\frac{81/2}{11}$	$\frac{2}{3}$	4
364	18 & larger	8	$14\frac{1}{2}$	6	

6 to the box

SET No. 360, 1 each of Nos. 361, 362, 363 and 364. Weight 1 lb. 4 ozs.

SET No. 360½, 1 each of the 6 above Drivers. Weight 1 lb. 6 ozs.

Sets available in fibre box or pocket leatherette rolls. See price sheet.

Van-Chrome Offset Screw Drivers

Nickel Plated With Polished Blades
Hand Forged from Square Chrome Alloy Steel

More practical and efficient because the bits are forged at a 45° angle. This special pitch engages screws in the most awkward places which are not accessible with the conventional type offset driver.

Catalog No.	Size Stock	Length	Weight Lbs.	Per Doz. Ozs.
351	3/16	41/4		9
352	1/4	$4\frac{3}{4}$	1	2
353	5/16	$5\frac{1}{2}$	1	14
354	3/8	$6\frac{5}{8}$	3	4

Packed six to the box

SET No. 350 Comprises one each of the above four sizes, in attractive 4-pocket leatherette tool roll. Weight 14 ozs.



Van-Chrome Punch and Chisel Sets

Chrome Alloy Steel

Carefully forged from octagon steel and designed for perfect balance, each Van-Chrome Punch and Chisel is branded with the Herbrand mark of distinction which is your guarantee of quality and service. Finished in rust-resisting satin nickel with blades polished.

Set No. C-3

Contains 1 each of Cold Chisels Nos. 402, 403 and 404. See page 26 for specifications. Packed in flannel lined leatherette pocket roll.

Weight 1 lb. 4 ozs.

Set No. C-5

Contains 1 each of Flat Chisels Nos. 402, 403, 404, 405 and 406, listed on page 26, in lined leatherette roll. Weight 3 lbs. 11 ozs.

Set No. C-6

Contains 1 each of Chisels Nos. 401, 410, 420, 430 and No. 471 Center Punch described on pages 26 and 27, in leatherette roll.

Weight 11 ozs.

Set No. C-10

This Combination Punch and Chisel Assortment contains 1 each of assorted Punches Nos. 440, 441, 450, 470 and Flat Cold Chisel No. 400 in flannel lined leatherette roll.

Weight 9 ozs.

Set No. C-15

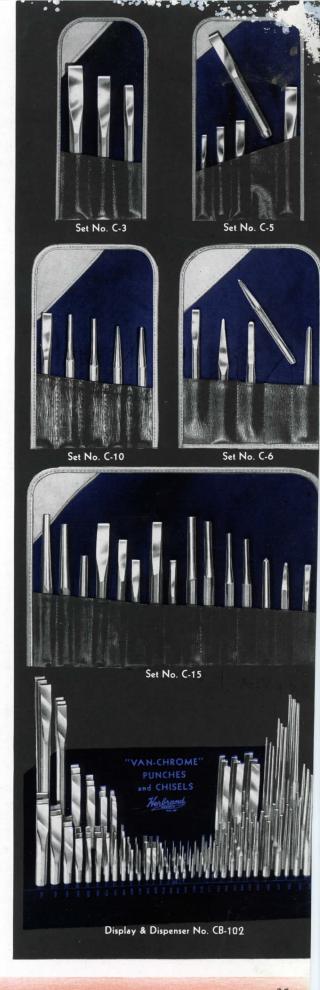
Super Punch and Chisel Set No. C-15 is a well balanced assortment of 15 of the most popular Punches and Cutting Tools, affording the mechanic a complete well rounded, all service set. It contains 1 each assorted Chisels Nos. 401, 402, 403, 410, 412, 421 and 431. Assorted Punches Nos. 443, 444, 445, 446, 451, 452, 453 and 471, listed on pages 26 and 27, in a flannel lined leatherette 15 pocket roll. Weight 3 lbs. 9 ozs.

Punch and Chisel Display and Dispenser CB-102

To make it easier for you to sell more Quality Punches and Chisels this handy wooden dispenser is supplied gratis with the assortment listed below.

Contains 3 each of 34 popular types and sizes: Flat Cold Chisels Nos. 400 to 406; Cape Chisels 410 to 412; Gouge Chisels 420 and 421; Diamond Point Chisels 430 and 431; Pin Punches Nos. 440 to 447; Taper Punches 450 to 453; Drift Punches 460 to 462; Center Punches 470 and 471; Jimmy Bars 480, 481 and 482. For individual listing see pages 26 and 27.

Total of 102 Tools. Size of Dispenser 24" wide x $8\frac{3}{4}$ " deep x 12" high. Weight 65 lbs.



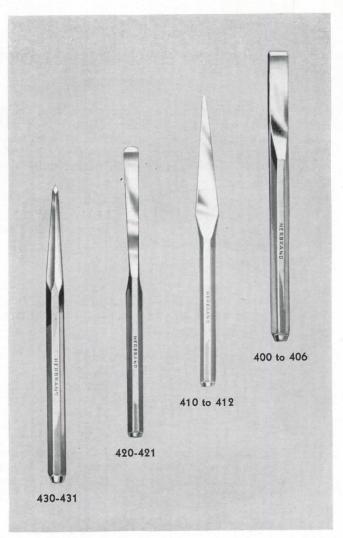
Van-Chrome Extra Quality Chisels

Drop Forged from Chrome Tungsten Steel

Forged from the best steel adaptable to these tools and individually tempered with perfectly timed electrically controlled heat treatment. The cutting edges are bevelled at the correct angle to remain sharp under extreme abuse. They are so finely tempered that they may be redressed with a file yet stand up under the hardest usage. Satin nickel with polished blades.

Flat Cold Chisels

			1,20		
No.	Size Stock	Width of Edge	Length		eight Doz. Ozs.
400	5/16	5/16	5	1	2
401	5/10	5/16 3/8	5 5	1	8
402	5/16 5/16 3/8	1/2	6	2	4
403	1/2	1/2 5/8 3/4 7/8	6	2 4 6	4 8
404	5/8	3/4	7	6	12
405	3/4	7/8	8.	10	8
406	3/8 1/2 5/8 3/4 7/8	ĺ	9	18	
		Cape Ch	isels		
410	5/16	7/32	5	1	2
411	3/8	5/16 3/8	6	2 4	$\frac{2}{4}$
412	5/16 3/8 1/2	3/8	6	4	2
	wh.	Gouge C	hisels		
420	5/16	7/32	5	1	2
421	5/16 3/8	1/4	6	2	4
	Dia	mond Poi	nt Chisels	5	
430	5/16 3/8	5/64	5	1	2
431	3/8	1/8	6	2	4





Van-Chrome Multiuse Pry Bar No. 485

For All Kinds of Prying and Pulling Work

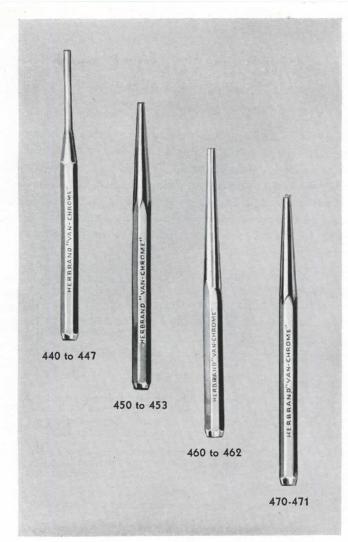
Drop Forged from Chrome Alloy Steel

The novel design of the forged head of this Pry Bar permits a great many uses never before found in any tool. It has all the utility of the older types plus additional value as a pry for taking off gears, bushings, bearings, grease caps, grease retainers, ball races and lifting cylinder heads. The tapered end can be used as a pry or for lining up body or fender bolt holes, motor

support bolt holes, body parts and the like. The 16" length gives good leverage for tough jobs and the scientifically designed head is engineered for a multiplicity of uses. Handsomely nickel plated and polished.

Length 16". Size stock $\frac{9}{16}$ ". Diameter of point $\frac{1}{4}$ ". Weight 1 lb. Packed 6 to the box.





Van-Chrome Punches Aligning and Pry Bars

Drop Forged from Chrome Alloy Steel

Constructed for strenuous driving, piercing and marking purposes—will retain their points permanently. Forged from the toughest Chrome Alloy Steel and scientifically heat treated for utmost endurance. Nickel plated and polished.

Pin Punches

No.	Size Stock	Diameter of Point	Length	Weight Lbs.	Per Doz. Ozs.
440	5/16	1/8	4	1	2
441	5/16	5/32	4	1	2
442	5/16	3/32	4	1	2
443	5/16	5/32	6	1	8
444	3/8	3/16	61/2	1	14
445	3/8	7/32	67/8	2	4
446	3/8	1/4	7	2	4
447	1/2	5/16	$7\frac{1}{2}$	4	8

Solid Taper Punches

No.	Size Stock	Diam. of Point	Taper	Length	Wt. Per Lbs.	Doz. Ozs.
450	5/16	1/16	2	41/2	1	2
451 452	1/8 1/2 5/	3/16 1/4 5/	$\frac{21_{2}}{31_{4}}$	6	3	12
453	Lor	1g Taper	0/2	Punches	0	

	Long	Taper	Drift	Punches	
460	3/8	1/8	$3\frac{1}{2}$	8	2
461	1/2	5/32	$5\frac{1}{2}$	9	4
462	5/8	1/4	$5\frac{3}{4}$	11	9

Center Punches									
470	1	5/16	1	1/8	2	41/2	1	2	
471		3/8		7_{32}	$2\frac{1}{2}$	$4\frac{1}{2}$	1	14	



Van Chrome Jimmy and Aligning Bars

Plated and Polished

Forged from Chrome Alloy Steel

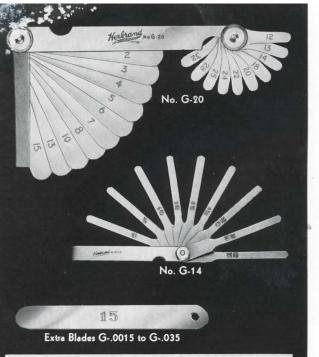
Invaluable for prying, alignment work and many other purposes. One end has a long, sharp pointed taper, the other end has a sharp curved leverage blade. Forged from the finest alloy steel available, hardened and tempered by a special process to insure toughness. Herbrand Jimmy Bars are made to "take it" and meet a maximum of abuse. Nickel plated, polished points.

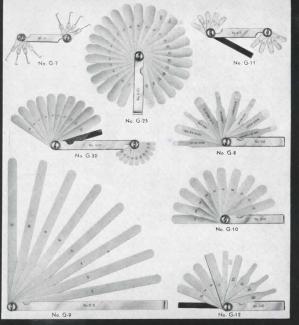
Jimmy and Aligning Bars

No.	Size Stock	Diameter of Point	Length	Weight Lbs.	Per Doz Ozs.
480	1/2	1/8	12	6	12
481	5/8	5/32	16	13	8
482	3/4	1/4	20	24	12

Refer to Page 25 for Complete Punch and Chisel Sets









Van-Chrome Feeler Gauges

Tested for Accuracy and Temper Imported Swedish Steel

For dependable accuracy feeler gauges must be made from the finest grade materials, properly hardened and tempered. "Van-Chrome" Thickness Gauges are made with the greatest precision from the finest grade of imported Swedish Steel, scientifically hardened and tempered to withstand wear. Each blade is tested to insure the exact thickness to a minute degree.

All Herbrand Thickness Gauges are equipped with knurled locknuts which release the blades instantly for rapid selection of size desired, and when tightened lock the individual blade into the working position, retaining the blades not in use firmly in the handle. Sizes are permanently etched on each blade.

Types and Sizes

No. G-7 Spark Plug Wire Gauge, the latest development for accurate spark plug gap spacing. 8 wire gauges $1\frac{3}{4}$ " long:—.022; .025; .027; .028; .030; .032; .035; .040. Ends of wires are turned at 90° to set electrodes recessed below the shell.

No. G-8, Special Ford Gauge for all models. 9 sizes with Go-No-Go feature 3¼" long:—.013 valve; .014 valve; .014 distributor; .016 distributor; .017 valve; .022 distributor; .022 valve; .025 plug; .035 plug.

No. G-9, Extra Long Feeler Gauge for pistons, etc. 8 sizes, 9" long:—.002; .003; .004; .005; .006.; .008; .010; .015.

No. G-10, Standard Feeler Gauge containing 10 sizes 3\%" long:-..002; .003; .004; .005; .006; .007; .008; .010; .012; .015.

No. G-11, Ignition Gauge, short narrow blades for ignition, distributor points and spark plugs; 10 sizes 1½" long and 3" point file:—.012; .013; .014; .018; .020; ,022; .025; .028; .032; .035.

No. G-12, Special Chevrolet Gauge for valves and ignition; 7 blades 31/4" long and point file, 3" rule and float level gauge: —.006; .008; .013; .018; .024; .032; .040.

No. G-14, Brake Adjusting Gauge for correct clearance between brake and shoe. 9 sizes 4" long:—.006; .008; .010; .012; .015; .018; .020; .022; .032.

No. G-20, General Purpose Gauge for tappet, and ignition work—most universal gauge on the market; 10 blades $1\frac{1}{2}$ " long, 10 blades $3\frac{5}{8}$ " long and 3" point file:—short blades, .012; .013; .014; .018; .020; .022; .024; :025; :028; :032—Long blades:—.002; .003; .004; .005; .006; .007; .008; .010; .013; .015.

No. G-25, Universal Master Gauge with a full range of spacers; 25 blades 3%" long:—.0015; .002; .003; .004; .005; .006; .007; .008; .009; .010; .011; .012; .013; .014; .015; .016; .018; .020; .022; .024; .025; .028; .030; .032; .035.

Extra Blades for Replacement

Available in the popular range of thicknesses, size $\frac{1}{2}$ " x $3\frac{1}{2}$ " with hole for insertion in gauges. Fit most any holder—sizes etched on blades:

G-0015; G-002; G-004; G-006; G-008; G-013; G-015; G-018; G-024; G-025; G-032; G-035. 6 to the envelope which is the minimum quantity sold.

Display Card No. G-1 temporarily discontinued.





Set No. 99

Feather lightness with amazing strength marks "Van-Chrome" Electrical Wrenches as the handiest for tricky carburetor and ignition jobs. They have different openings on each end, yet each size is duplicated on a separate wrench at a different angle assuring accessibility to miniature nuts under all conditions. Ignition experts designed these wrenches for greater efficiency on magnetos, coils, ignition, distributors, ammeters or any small nuts such as radio and electrical appliances. These wrenches are Drop Forged and not cheap stampings. They are accurately machined and heat treated.



Set No. 70

The 8 opening sizes in this set of four Midget Box Wrenches are necessary to handle the popular sizes of small nuts.



Electrical and Ignition Wrenches

15° and 60° Angle Heads

Drop Forged from Chrome Vanadium Steel

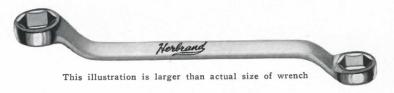
Wrench	Size Op	penings	Thickness	Length	Weight Per Doz		
No.	15° Angle	60° Angle	Heads		Ounces		
81	13/64	15/64	7/64	3	3		
82	15/64	13/64	7/64	3	3		
83	7/32	$\frac{1}{4}$	7/64	3	3		
84	1/4	7/32	764	3	3		
85	9/32	5/16	1/8	$\frac{31}{2}$	0		
86	5/16	9/32	1/8	$\frac{31}{2}$	0		
87	11/32	3/8	964	4	0		
88	3/8	11/32	964	4	19		
89	7/16	$\frac{1}{2}$	11/64	$4\frac{1}{2}$	14		

Packed 6 to the box

SET No. 97, one each Nos. 81, 82, 83, 84, 85, 86, 87. Weight $4\frac{1}{2}$ ozs. In flannel lined pocket leatherette roll.

SET No. 98 contains one each of Wrenches Nos. 81, 83, 85, 87 and 89. Ignition Plier No. 167. Ignition Screw Driver No. 310 and Ignition Feeler Gauge with 10 short narrow blades and point file, No. G-11. Weight 8 ozs. In flannel lined leatherette case.

SET No. 99 contains one each of the nine wrenches in above table and the No. 167 Midget Plier illustrated on page 18. Weight $7\frac{1}{2}$ ozs. In flannel lined pocket leatherette case.



Midget Box Wrenches

For Electrical and Ignition Work

Drop Forged from Chrome Molybdenum Steel

Herbrand Midgets are accurately broached with 6-point openings for perfect engagement of small nuts and both ends are offset for easy clearance of obstructions. Lengths are correct for perfect balance. Chrome plated, polished heads.

Wrench Number	Size Openings	Length	Weight Per Doz. Ounces
71 72	3/16 & 13/64 7/32 & 15/64	27/8 31/8	3 3
73 74	1/4 & 9/32 5/16 & 11/32	$\frac{3\frac{3}{8}}{3\frac{3}{4}}$	6 9

Packed 6 to the box.

SET No. 70, containing one each of the above 4 wrenches in a flannel lined leatherette roll.







New Van-Chrome Master Tappet Wrenches

Bar Design for Rigid Strength—9½" Long

Drop Forged from Chrome Vanadium Steel

The bar design of the paneled handles not only strikes a note of beauty but has been so scientifically blended into the heads of the wrench that extra strength and rigidity, so much desired by mechanics, is actually imparted. Chrome plated and polished.

Wr. No.	Size Openings	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	ness	L'gth	Per	eight Doz. Ozs.
T-21 T-22 T-23 T-24	7/16 & 1/2 1/2 & 9/16 5/8 & 11/16 3/4 & 7/8	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1/4 & 5/16 5/16 & 3/8 7/16 1/2 & 5/8	1/4 & 5/16 5/16 & 3/8 7/16	11/64 3/16 13/64 7/32	$9\frac{1}{2}$ $9\frac{1}{2}$ $9\frac{1}{2}$ $9\frac{1}{2}$ $9\frac{1}{2}$	2 3 3 4	4 12 8

6 to the box.

SET No. T-40, two each of Nos. T-22 and T-23. Weight 14 oz. SET No. T-80, two each of the 4 wrenches above. Weight 2 lbs.

The 9½ inch length of all these wrenches is recommended by engineers as the proper length for general all-round tappet adjusting work. Thin and narrow pearshaped heads of carefully gauged thickness are scientifically balanced with the tappet nuts for speedy action, the greatest degree of accuracy, and to avoid overlapping. The 15° angle opening has proved to be the best pitch under most conditions. Openings are precision machined to the correct depth to firmly grip the tappet nuts and permit the maximum turning radius without interference from the motor block.



*6VAN-CHROME "Herbrand TAPPET



Van-Chrome Tappet Wrenches

Double End—15° Angle

Drop Forged From Chrome Alloy Steel

Wr. No.	Size Openings	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	ness	L'gth	Per	Doz. Ozs.
H-1 H-2 H-3 H-4	7/16 & 17/32 1/2 & 9/16 5/8 & 11/16 3/4 & 7/8	1/4 3/8 1/2	1/4 · · · · · · · · · · · · · · · · · · ·	1/4 5/16 & 3/8 7/16 1/2 & 9/16	5/32 5/32 7/32 7/32	7½ 8 8 9	1 1 3 4	8 14 3 6

Packed 6 to the box.

SET No. H-70, two each of Nos. H-2 and H-3. Weight 13 ozs. SET No. H-75, two each of Nos. H-1, H-2 and H-3. Weight 1 lb. SET No. H-80, two each of Nos. H-1, H-2, H-3, H-4. Wt. 13/4 lb.

These moderately priced Tappet Wrenches have nation-wide acceptance and in the face of all competition they still stand supreme. They have long, narrow pointed jaws set at just the proper pitch to engage the tappet nuts readily at an angle most convenient for efficient adjustment.

H-2 and H-3, commonly used for most adjustments, are made in equal lengths but with different graduated openings.

Finished in permanent nickel with mirror polished heads and satin finished grips.

All Tappet Wrench Sets Are Available in Fibre Boxes or Pocket Leatherette Tool Rolls. See price sheet.







Set No. 1025D

Van-Chrome Open-End Wrenches

15° Angle Pattern—Light—Thin—Long—Strong

Drop Forged from Molybdenum Steel

Wrench No.	Size Openings	For S.A.E. Nuts and Cap Screws	Thickness Heads	Length		ight Doz. Ozs.
1721 1021 1722 1723	5/16 & 3/8 5/16 & 13/32 5/16 & 7/16 3/8 & 7/16		3/16	5	1	
1023 1723A	13/32 & 1/2 3/8 & 1/2	· · · 5/16 · · · 5/16	364	53/4	1	14
1725 1725A 1725B 1025	$7_{16} & 1_{2} \\ 7_{16} & 9_{16} \\ 1_{2} & 9_{16} \\ 1_{2} & 19_{32} $	14 & 5/16 14 & 3/8 5/16 & 3/8	15/64	$6\frac{1}{2}$	2	4
1726 1727 1027 1027C 1027F	1/2 & 5/8 9/16 & 5/8 19/32 & 11/16 9/16 & 11/16 5/8 & 11/16	5/16 & 7/16 3/8 & 7/16 3/8 7/16	17/64	71/4	3	6
1728 1028S 1729 1029 1030	9/16 & 3/4 5/8 & 25/32 5/8 & 3/4 11/16 & 25/32 11/16 & 7/8	3/8 & 1/2 7/16 7/16 & 1/2 	1964	85/16	5	10
1731 1731A 1031 1731B 1033A	3/4 & 13/16 3/4 & 7/8 25/32 & 7/8 13/16 & 7/8 7/8 & 15/16	1/2 & 9/16 · 9/16 · 9/16 · 9/16 9/16 & 5/8	23/64	$9\frac{3}{8}$	7	8
1033 1733 1033C 1034 1034A 1035	7/8 & 31/32 7/8 & 1 15/16 & 1 7/8 & 11/16 15/16 & 11/16 31/32 & 11/16	9/16 9/16 & 11/16 5/8 & 11/16 9/16 & 3/4 5/8 & 3/4	27/64	103/4	12	6
1735 1736 1037 1737	$\begin{array}{c} 1 & \& & 1 \frac{1}{8} \\ 1 & \& & 1 \frac{1}{4} \\ 1 \frac{1}{16} & \& & 1 \frac{1}{4} \\ 1 \frac{1}{8} & \& & 1 \frac{1}{4} \end{array}$	11/16 & 7/8 11/16 & 7/8 3/4 & 7/8	31/64	$12\frac{1}{4}$	18	

Packed 6 to the box.

SET No. 1025D contains one each of Nos. 1723, 1025, 1027C, 1028S, 1731A, 1033C. Weight 3 lbs. 4 ozs. Packed in leatherette tool roll. The pointed jaws and thin, narrow heads offer wide accessibility and the extra length provides greater leverage. A perfect fit on nuts is assured because the openings are accurately machined to exact tolerances and they will not slip under the hardest pull. Nickel plated with satin finished grips and polished heads.





Set No. 1836

The thin heads and narrow pointed jaws of this wrench reach around obstructions and move hidden nuts or bolts with a firm sure grip in positions that ordinary wrenches cannot reach.

Offset ends of each wrench carry the same opening with one head at 45°, the other at 90° angles.

Van-Chrome Obstructo Wrenches

45° and 90° Angle Heads—Drop Forged—Alloy Steel

Wr. No.	Size Openings	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	Thick- ness Heads	L'gth	Per	eight Doz. Ozs.
1821	3/8	3/16	iλ	11/64	5½ 51/2	1	
$\begin{array}{c} 1823 \\ 1825 \end{array}$	1/2	5/16	5/16	13/64	$\frac{61/2}{2}$	1	14
$1827 \\ 1829$	9/16 5/2	3/8 7/a	3/8 7/6	$\frac{13}{64}$ 15 64	$\frac{6\frac{1}{2}}{7\frac{1}{2}}$	$\frac{1}{2}$	14 10
1831	3/4	1/2	1/16 1/2	1564	$7\frac{1}{2}$	3	

Packed 6 to the box.

SET No. 1836, one each of the above in leatherette pocket roll. Weight 1 lb. 3 ozs. Satin nickel, heads polished.







Set No. 1227

Van-Chrome Multitype Wrenches

Combination Box and Open End

Drop Forged From Chrome Vanadium Steel

Wrench No.	Size Openings	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	Length	Pe	eight r Doz. s. Ozs.
1212	3/8		3/16		4½	1	2
1214	7/16		1/4	1/4	5	1	5
1216	1/2	1/4	5/16	5/16 3/8	$5\frac{1}{2}$	1	8
1218	9/16		3/8	3/8	6	2	1
1220	5/8		7/16	7/16	$6\frac{1}{2}$	2	10
1222	11/16	3/8	, 10	7 10	7 2	3	6
1224	3/4		1/2	1/2	71/9	4	6
1226	13/16		9/16 5/8	/ 2	83/4	6	1
1228	7/6	1/2	5/0	9/10	101/2	6	6
1230	15/16	/ 4	/ 0	9/16 5/8	121/4	7	2
1232	1 1 1		3/4	11/10	141/2	15	10
1234	11/16	5/8	/4	11/16 3/4	141/2	15	10
1236	11/8	/8	7/8	/4	17	31	10
1240	114	3/4	1	7/8	17	31	

Packed 6 to the box.

SET No. 1225, 1 each Nos. 1214, 1216, 1218 and 1220. Wt. 12 ozs.

SET No. 1227, 1 each of the 6 sizes Nos. 1214 to 1224 inclusive. Weight 1 lb. 6 ozs.

SET No. 1229, 1 each of 10 sizes. Nos. 1212 to 1230. Weight 2 lbs. 12 ozs.

SET No. 1231, 1 each of 12 sizes, Nos. 1212 to 1234. Wt. 5 lbs.

All sets listed are available in substantial fibre boxes or leatherette pocket tool rolls. Refer to price schedule.

The new "Van-Chrome" Multitype is a dual-purpose wrench combining in one tool two types of openings—box and open end. The advantages instinctively appeal to every mechanic because the handy and practical combination of different type openings equip him for most emergencies. If one style opening is not adapted to the particular job simply flip the wrench over and use the other end.

These general service wrenches find a wide range of use and are especially adaptable for carburetor, manifold, clutch, generator and starter work.

The box end, with its 12-point opening, is offset at 15° to give the proper clearance for obstructions and knuckles. The open end is angled at $22\frac{1}{2}^{\circ}$ for efficiency. Each end has the same size openings. Handles are panelled for a firm grip, and ease of handling.

The fourteen popular sizes in which these wrenches are made cover at least 98 per cent of general service work. Drop forged from special analysis Chrome Vanadium Steel, accurately machined and heat treated all over for super-strength. Chrome plated with heads polished to a high lustre.

Available in four different popular sets that meet every demand.





Set No. 6920

The national recognition and acceptance accorded the new Ultra Box Wrenches introduced by Herbrand has created a demand for a complete range of patterns. This new 15° angle design is a distinct engineering improvement; has slim, graceful lines, maximum accessibility, is faster in service and easier to handle.



Set No. 4920

Another Ultra Box Wrench with modified offset heads which is extremely practical and necessary for awkwardly placed nuts where the turning radius is limited. Distinguished by the paneled handles and refined engineering features, this wrench is precision built from the finest steel and attractively finished in two-tone chrome plate with polished heads.



Van-Chrome Ultra Box Wrenches

Improved Short 15° Angle Pattern—Paneled Handles

Drop Forged from Chrome Vanadium Steel

Careful drop forging from select Chrome Vanadium Steel, expert heat treatment, precision machining and paneled handles immediately identifies these Ultra Box Wrenches as super-quality tools of distinction. Triple plated in a two-tone chrome nickel with the heads polished to a high lustre.

Wrench No.	Size Openings	For U.S. Std. Nuts	Hex.	For S.A.E Nuts and Cap Screws	Length	Weight Per Doz. Lbs. Ozs.
6923 6925 6927	3/8 & 7/16 1/2 & 9/16 5/8 & 11/16	1/4 3/8	3/16 & 1/4 5/16 & 3/8 7/16	5/16 & 3/8 7/16	4 ½ 5 5 ¾	$egin{array}{cccc} 1 & & 2 \\ 1 & & 14 \\ 2 & & 10 \\ \end{array}$

Packed 6 to the box.

SET No. 6920, contains one each of the above. Weight 8 ozs.



Van-Chrome Ultra Box Wrenches

Improved Short Offset Pattern—Paneled Handles

Drop Forged from Chrome Vanadium Steel

Wrench No.	Size Openings	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	Length	Weight Per Doz. Lbs. Ozs.
4923 4925 4927	3/8 & 7/16 1/2 & 9/16 5/8 & 11/16	1/4 3/8	3/16 & 1/4 5/16 & 3/8 7/16	5/16 & 3/8 7/16 · · ·	$\frac{4\frac{1}{2}}{5\frac{1}{4}}$	1 2 1 14 3

Packed 6 to the box.

SET No. 4920, contains one each of the above. Weight 10 ozs.

Sets described are obtainable in fibre boxes or handy pocket leatherette tool rolls. See price sheet.

See page 29 for Midget Box Wrenches







Set No. 3901

Van-Chrome Ultra Box Wrenches

Modern—Special 30° Angle—Paneled Handles

Drop Forged from Chrome Vanadium Steel

Scientifically heat treated for life-time service. Handsomely plated in lustrous chromium with heads polished to mirror brightness.

Wrench No.	Size Openings	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	Length	Weig Per I Lbs.	oz.
3923 3925	3/8 & 7/16 1/2 & 9/16	1/	3/16 & 1/4	1/4	61/2	1	10
3927	9/16 & 5/8	74	5/16 & 3/8 3/8 & 7/16	5/16 & 3/8 3/8 & 7/16	$\frac{79_{16}}{85_{8}}$	$\frac{2}{3}$	6
3929 3931	5/8 & 11/16 3/4 & 13/16	3/8	7/16 1/2 & 9/16	7/16	$\frac{9^{11}}{10^{7/8}}$	4	8 12
3933	7/8 & 15/16	1/2	5/8	9/16 & 5/8	$12\frac{1}{4}$	8	10

Extra Long

*3935	1 & 11/16		5/8	3/4	11/16 & 3	4 16	16	8
*3937	11/8 & 11/4		3/4	7/8 & 1	7	8 18	25	8
*3938	15/16 & 13/8			11/8	á	. 20	36	
*3939	$1\frac{7}{16} \& 1\frac{1}{2}$	7/8		11/4	1 .	. 20	36	

^{*} Do not have embossed panel design.

Packed 6 to the box.

SET No. 3901 contains 6 wrenches, one each of Nos. 3923 to 3933. SET No. 3902, one each of Nos. 3923, 3925, 3929, 3931, 3933.

Sets listed can be purchased in substantial fibre boxes or attractive leatherette tool rolls. See price schedule.

Ultra in name, ultra in modern design, these wrenches are the utmost in versatility and offer the broadest scope of service. Herbrand introduces them after working extensively with mechanics in order to develop a box wrench to the highest degree of perfection, efficiency and better adapted to the service of modern cars.

Low and close clearances offer no difficulties of accessibility because the heads are distinctively angled at approximately 30 degrees. This new angle assures perfect clearance for both knuckles and head bolts but retains sufficient offset to reach countersunk or imbedded nuts with ample leverage for a strong pull and without any possibility of tilting. The extremely thin side walls of the 12-point openings are machined to exacting tolerances to snugly fit bolt heads or nuts for which they are sized. Chamfered both top and bottom so that either side may be used with equal facility, they locate and engage automatically.

Painstakingly engineered to a very definite formula for perfect graduation and balance of length, size openings and clearance on today's compact motors. Beauty of appearance and perfect comfort of grip have been combined in the raised bar design which readily marks them as quality tools of distinction.

Individually drop forged from the finest Chrome Vanadium the finest Chrome Alloy Steel.



Engineered with the greatest care and precision, this new style 10° angle wrench is built for perfect balance, ease of accessibility, maximum application and strength and gives the mechanic a new, modern box wrench that will out-perform any of its type.

A broad study of the exacting requirements and concentrated engineering have perfected this wrench to successfully cope with the complicated service problems encountered on the highly developed cars of today.

The heads are designed with a chamfer, both top and bottom, so that either side engages the nuts equally well in any position and the 12-point, thin side wall openings are precisely machined for a full, secure grip that will not slip. The angle of the handle affords generous clearance with the easy reach of a straight wrench and applies a powerful, direct force avoiding tilting, slipping and bruising of knuckles.

The distinctive, raised paneled handles identify them as the Ultra in the box wrench field. The length of the handles are carefully graduated to balance with the opening sizes for perfect coordination of clearance and pull.

Precision drop forged from special Chrome Vanadium Steel and toughened by exacting heat treating methods. Attractively chrome nickel plated with bright panels and mirror polished heads.



Set No. 5920

Van-Chrome Ultra Box Wrenches

Latest—Special 10° Angle—Paneled Handles

Drop Forged from Chrome Vanadium Steel

Available in five sizes with 12-point different openings in each end, extra thin side walls, balanced graduated lengths, and openings chamfered both top and bottom for use from either side. Supplied individually or in complete sets.

Heat treated their entire length for durability under all conditions. Smoothly ground, nickel plated with bright panels and polished heads.

Wrench No.	Size Openings	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	Length	Per	ight Doz. Ozs.
5923	3/8 & 7/16		3/16 & 1/4	1/4	$6\frac{1}{2}$	1	10
5925	1/2 & 9/16	1/4	5/16 & 3/8	5/16 & 3/8	$7\frac{1}{2}$	2	
5927	9/16 & 5/8		3/8 & 7/16	3/8 & 7/16	85/8	3	2
5929	11/16 & 3/4	3/8	1/2	1/2	93/4	4 C	12
5931	13/16 & 7/8	1/2	9/16 & 5/8	9/16	11	6	12

Packed 6 to the box.

SET No. 5920 contains one each of the above five wrenches. Weight 1 lb. 6 ozs. Available in fibre box or leatherette roll.





Multihex Box Wrenches

Offset Patterns 45° Angle **Drop Forged from Chrome Molybdenum Steel**

Short 45° Offset Pattern

Wrench No.	Size Openings	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	Length	Wei Per I Lbs.	
4723 4725B 4727A	3/8 & 7/16 1/2 & 9/16 5/8 & 11/16	1/4 3/8	3/16 & 1/4 5/16 & 3/8	5/16 & 3/8 7/16	$\frac{4\frac{1}{2}}{5\frac{1}{4}}$	1 1 3	2 14

Long 45° Offset Pattern

3723	3/8 & 7/16		3/16 & 1/4	1/4	8½	2	4
3725B	1/2 & 9/16	1/4	5/16 & 3/8	5/16 & 3/8	9	3	6
3727	9/16 & 5/8		3/8 & 7/16	3/8 & 7/16	93/4	4	14
3727A	5/8 & 11/16	3/2	7/16	7/16	93/	4	14
3729A	3/4 & 25/32	7/16	1/2	1/2	11	7	2
3731B	13/16 & 7/8	1/2	9/16 & 5/8	9/16	$12\frac{1}{2}$	8	10
3733C	15/16 & 1		3/4	5/8 & 11/16	$14\frac{1}{2}$	14	

Packed 6 to the box.











Multihex Box Wrench Sets

Offset 45° Angle Patterns

SET No. 3700 carries one each of 5 Long 45° Offset Box Wrenches, Nos. 3723, 3725B, 3727A, 3729A and 3731B. Weight 2 lbs. 8 ozs.

SET No. 3701 comprises one each of the 3 Short 45° Offset Pattern Nos. 4723, 4725B and 4727A. Weight 10 ozs.

SET No. 3702 contains 9 wrenches, one each of the 3 Short 45° Offset Pattern Nos. 4723, 4725B, 4727A and one each of the 6 Long 45° Offset Type Nos. 3723, 3725B, 3727A, 3729A, 3731B and 3733C. Weight 4½ lbs.

SET No. 3704 (not illustrated) contains one each of the 6 Long 45° Offset Pattern Nos. 3723, 3725B, 3727A, 3729A, 3731B and 3733C. Weight 3½ lbs.

All sets available in fibre boxes or leatherette pocket rolls.

Do not confuse the genuine "Van-Chrome" Multihex Box Wrenches with similarly designed, cheaper wrenches. There is an essential difference because Multihex are precision built to the specifications of mechanics. They are drop forged from a special analysis Chrome Molybdenum Steel, individually machined to precision tolerances with clean, accurate 12-point openings that snugly fit the size nuts for which they are intended, and heat treated to a definite standard to render them breakproof. They are correctly designed for maximum speed and handling efficiency with extremely thin side walls to reach sunken nuts and a well proportioned handle for positive grip.

Available in two patterns-Short 45° Offset and Long 45° Offset Heads. The heads are set at the correct pitch and just the right degree of offset to clear the obstructions most commonly encountered. Each end has a different 12-point graduated opening, providing a range of sizes fitting all popular nuts. Here you have refinements of speed, efficiency and moderate price backed by a quality guarantee that assures perfect satisfaction. Finished in satin nickel with heads polished.







Multihex Box Wrenches

10° and 15° Angle Patterns

Drop Forged from Chrome Molybdenum Steel

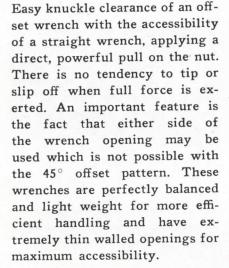
Short 15° Angle Pattern

Wrench No.	Size Openings	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Nuts and Cap Screws	Length	Weight Per Doz. Lbs. Ozs.
6723 6725B 6727A	3/8 & 7/16 1/2 & 9/16 5/8 & 11/16	1/4 3/8	3/16 & 1/4 5/16 & 3/8 7/16	5/16 & 3/8 7/16 · ·	$\frac{4}{4^{1/2}}$	$ \begin{array}{ccc} 1 & 2 \\ 1 & 14 \\ 2 & 10 \end{array} $

Long 10° Angle Pattern

5723	3/8 & 7/16		3/16 & 1/4	1/4	63/4	1	8
5725B	1/2 & 9/16	1/4	5/16 & 3/8	5/16 & 3/8	77/8	3	
5727	9/16 & 5/8	0 / 0 7 /	3/8 & 7/16	3/8 & 7/16	8/8	4	10
5729 5731A	11/16 & 25/32 3/4 & 7/8	3/8 & 7/16 1/2	1/2 & 5/8	1/2 & 9/16	$\frac{10}{11\frac{1}{8}}$	9	12

Packed 6 to the box.



Herbrand makes these wrenches in the Short 15° Angle and the Long 10° Angle Patterns to meet every need. Each pattern has been carefully engineered to give the necessary leverage yet sufficiently short to clear major obstructions. The clean cut 12point openings are individually broached to insure precision and a full, firm fit on the size nuts for which intended. The top of the box socket is chamfered so that nuts readily locate in the openings. Available in all the popular sizes with a different opening in each end. Finished in satin nickel with the heads polished and buffed brightly.



Set No. 5720



Set No. 5721



Set No. 3703

Multihex Box Wrench Sets

10° and 15° Angle Patterns

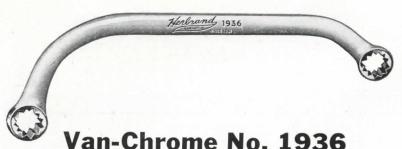
SET No. 3703, one each of the 3 Short 15° Angle Pattern Nos. 6723, 6725B and 6727A. Weight 8 ozs.

SET No. 5720 consists of 5 Long 10° Angle Box Wrenches, Nos. 5723, 5725B, 5727, 5729, and 5731A. Weight 2 lbs. 6 ozs.

SET No. 5721 is a complete assortment carrying 1 each Nos. 6723, 6725B, 6727A, Short 15° Pattern and Nos. 5723, 5725B, 5727, 5729 and 5731A in the Long 10° Angle Pattern, 8 Wrenches in all. Weight 3 lbs.

All sets available in fibre boxes or leatherette rolls.





Van-Chrome No. 1936 Starter and Manifold Wrench

For Fords, Chevrolet, Buick, Pontiac, Hudson, Olds, Etc.

Drop Forged from Chrome Molybdenum Steel

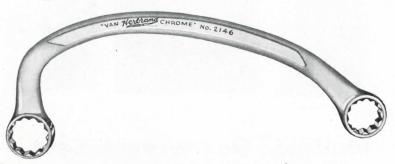
12-point openings $\%_{16}$ " and $\%_{8}$ ". Satin nickel, polished heads. Length 8". Weight 5 ozs. 6 to the box.



For All Models Chevrolet

Drop Forged from Chrome Vanadium Steel

12-point openings $\frac{5}{8}$ " and $\frac{3}{4}$ ". Satin nickeled, heads polished. Length $7\frac{3}{4}$ ". Weight 5 ozs. 6 to box.



Van-Chrome No. 2146 Starter and Manifold Wrench

For Late Model Chrysler Built and Other Cars

Drop Forged from Chrome Vanadium Steel

12-point openings $\%_{16}{''}$ and $5\%_8{''}$, special clearance bends. Satin nickeled, polished heads.

Length 7". Weight 7 ozs. 6 to box.

A real time-saving tool that replaces many special, costly wrenches. Combines 12-point popular openings of $\frac{5}{8}$ " and $\frac{9}{16}$ ". The $\frac{5}{8}$ " opening fits Buick, some models of Chevrolet, Studebaker, Pontiac Six and Pontiac Eight starter nuts, also Buick manifold. The $\frac{9}{16}$ " opening fits nuts on Buick heat trap and carburetor, Hudson starter and the manifold nuts on Chevrolets; Oldsmobile 6 and 8, Ford V-8's, Pontiac 6 and 8, and other cars.



Combining the two popular 12-point openings, $\frac{5}{8}$ " and $\frac{3}{4}$ ", this new special bend wrench clears all obstructions for immediate contact with the nuts on the starter motor housing on all Chevrolet models. The $\frac{5}{8}$ " opening takes care of the nuts on many early models and the $\frac{3}{4}$ " end handles later models. The unusual contour, extra deep bends and popular combination of openings adapt this wrench to many applications. Satin nickel.

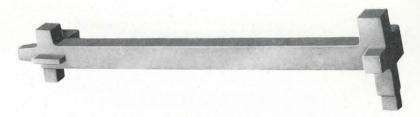


Designed to service the exhaust manifold and starter nuts on late model Chrysler built cars, where ordinary wrenches are useless.

The $\frac{9}{16}$ " opening is angled to fit the exhaust manifold nuts and has been made extra thin for easy engagement and ample clearance.

The $\frac{5}{8}$ " opening fits the starting motor nuts and the unusual bend clears the steering column control rods and obstructions that interfere with ordinary wrenches.





No more lost time searching for special drain plug sockets and handles. Here, combined in one wrench, are the ten different sizes of lugs required to service all countersunk drain and filler plugs in the clutch, crankcase, transmission and differential on most automobiles and trucks.

A solid drop forged tool with accurately sized lugs.



A new drop forged Drain Plug Wrench, designed by Herbrand to fit the male plugs on crankcase, transmission and differential of practically all cars. It has seven different 6-point and 8-point openings combined in one wrench, properly sized to fit all late popular models including Ford, Chevrolet, Pontiac, Plymouth, Dodge, Buick, Studebaker, Oldsmobile, Nash, Packard and other makes.

Drain Plug Wrench No. 193

Ten Tools In One for All Female Plugs

Drop Forged from Chrome Alloy Steel

Light in weight, compact, easy to handle, and designed to save time on oil changes. The lugs are forged accurately to size assuring perfect fit. Provides powerful leverage to easily remove stubborn plugs. Heat treated and satin nickeled.

Length 9". Weight 14 ozs. 6 to the box.



Drain Wrench No. 194

Seven Wrenches In One for All Male Plugs

Drop Forged from Chrome Alloy Steel

The precision openings insure a perfect fit and prevent mutilating or distorting plugs. Heat treated and finished in satin nickel. Four different 6-point and three different 8-point openings in one wrench which fit practically all drain plugs.

Length 9". Weight 11 ozs. 6 to the box.



Any frozen shackles are quickly freed and thoroughly greasing them becomes an easy, one-man job with this scientifically designed bar. The fork end fits over the spring applying side pressure instead of end pressure and is set at a 25° angle to give easy access to any type of spring. It clears the crankcase, muffler, fenders, and firmly grips THREE spring leaves. The long, thin pry end is knurled which prevents slipping.

Universal One-Man Grease Bar No. 190

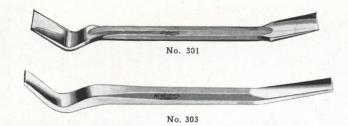
For Frozen Shackles

Drop Forged from Tool Steel

The use of this bar eliminates the hazard of bending, distorting or otherwise damaging the shackles in an effort to force grease through the bushings. Heat treated its entire length.

 $\frac{3}{4}$ " octagon steel. Length 30". Weight 4 lbs. 12 ozs. Finished in baked light gray enamel.





Star Nut Brake Tools

2 Types—Thin, Narrow, Wide Contact Points

Prop Forged from Chrome Alloy Steel

No. 301 For Bendix Brakes on most cars and trucks. Length $6\frac{3}{8}$ ". No. 303 For Chevrolet late models and other cars having a narrow brake slot.

Length 6\\[6\] ". Satin nickel polished points. 6 to the box.

Herbrand Star Nut Brake Tools are available in 2 distinct patterns providing 4 different angles and bends to cover the most complete range of usage.

Clear obstructions such as shock absorbers and frame fittings easily by working through and around such interfering parts. They have the proper sized contact points, perfect balance and that sensitive touch so necessary for locating and adjusting the cog screw on brakes.



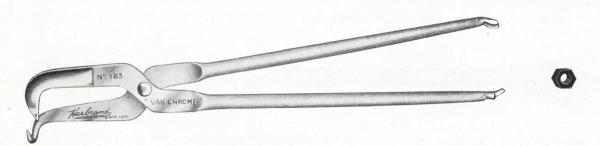
Works efficiently on smaller springs where extra long handles would be awkward. The corkscrew hook on the lower jaw lifts the spring easily with a secure grip and the sharp pointed gooseneck curve of the head grips the brake band in a positive way. The corkscrew hook is also adapted to cotter pin removal.



Brake Spring Plier No. 182

 $81\!/\!_2{}^{\prime\prime}$ Long Drop Forged from Chrome Alloy Steel

Satin nickel finish with heads polished to a high lustre. Length $8\frac{1}{2}$ ". Weight 6 ozs. Packed 6 to the box.



Van-Chrome Brake Spring Plier No. 183

13" Long for Heavy Duty Service

Drop Forged from Chrome Molybdenum Steel

Here is a large size Brake Spring Plier with a generous capacity of jaw opening for the quick and easy removal and replacement of brake shoe springs on practically all cars with internal brakes.

Strengthened by exacting heat treatment. Handsomely finished in double plated satin nickel with heads brightly polished.

Length 13". Weight 11 ozs. Packed 6 to the box.

The sharp point of the gooseneck curve of the upper jaw anchors on the brake lining in a positive way, while the corkscrew hook of the lower jaw pulls the spring into position readily. The ends of the handles have different forged notches one end slips the upright springs into position on the stud, the other end removes them easily. Ideal for removing cotter pins.





Adjusting brakes on the Ford V-8 with the ordinary straight wrench is a difficult job. This wrench was designed with special bends and offsets to easily reach behind the wheel and tire. It clears shock absorber arms, brake drums and other obstructions, leaving the operator's hands free to do a perfect job of adjusting quicker and easier. The 15" length provides the extra leverage to break loose

frozen and corroded nuts.

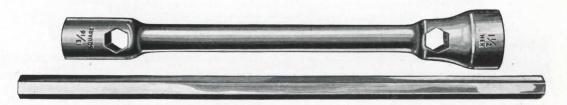
Van Chrome No 2333V Ford V-8 Brake Wrench

Special Offsets-Extra Long Reach

Drop Forged from Chrome Alloy Steel

The unique offsets on this special wrench clear the obstructions encountered in adjusting the Ford V-8 brakes. Fits all models except those with hydraulic brakes. The extra long handle gives greater leverage.

Satin nickel finish, polished heads. 8-point openings, $\frac{7}{16}$ " for passenger cars and $\frac{1}{2}$ " for trucks. Lengths 15". Weight 13 ozs. 6 to the box.



Equipped with the three necessary opening sizes to make it a complete Rim Nut Service Wrench for all Ford trucks. The deep openings are forged accurately for quick and positive engagement of the wheel nuts. The 20" hexagon leverage bar exerts a power that no nut can resist.

Ford Truck Rim Wrench 1152F

Complete for Trucks—Three Opening Sizes

Forged from solid bars of select steel, with extra deep powerful sockets, heat treated to withstand gruelling punishment. Finished in baked gray enamel.

Wrench openings, $^{13}\!\!/_{16}$ " square, $^{11}\!\!/_{8}$ " hex and $^{11}\!\!/_{2}$ " hex. Length 15 $^{7}\!\!/_{8}$ ". No. 1152H Hex Leverage Bar, 20" long is included. Weight 7 lbs.



Here in one handy Rim Wrench are combined the three necessary sizes of square and hexagon extra deep openings to service all Chevrolet dual wheels. The 20" Hex Handle furnished with this set slides through the hex openings in the heads of the wrench, acting as a T handle and creating leverage that easily starts, and spins off stubborn, frozen nuts

Truck Rim Wrench No. 1152G

Complete for Chevrolet Dual Wheels—3 Opening Sizes

Forged Solid—No Welds

Forged from solid bars of high carbon steel, expertly heat treated the entire length to stand up under the most strenuous work. Baked gray enamel finish.

Openings $\frac{5}{8}$ " square, $\frac{7}{8}$ " hex and $1\frac{1}{4}$ " hex. Length $15\frac{7}{8}$ ". The No. 1152H Leverage Bar which is included is 20" long. Wt. 7 lbs.





Four-Way Rim Wrench No. 1051X

Extra Long Arms for Wide Fender Clearance

Drop Forged Solid in One Piece-No Welds

Drop forged from High Carbon Steel and heat treated throughout. Finished in baked gray enamel.

Forged with deep popular openings of $\frac{5}{8}$ ", $\frac{3}{4}$ ", $\frac{13}{16}$ " and $\frac{7}{8}$ ". Length 15". Weight 3 lbs. 25 to the carton.



Universal Truck Rim Wrenches

Eight Extra Deep Forged Openings

Forged Solid—No Welds

Forged from solid bars of steel, with extra deep powerful sockets, heat treated and finished in baked gray enamel.

No. 1150A, openings $^{13}/_{16}$ " square, $1\frac{1}{8}$ " hex and $1\frac{1}{2}$ " hex. Length 15 $\frac{7}{8}$ ". Weight 4 lbs. 9 ozs.

No. 1150B, openings $\frac{5}{8}$ " square, $\frac{7}{8}$ " hex and $1\frac{1}{4}$ " hex. Length $15\frac{7}{8}$ ". Weight 4 lbs. 6 ozs.

No. 1150C, Leverage Bar has $1\frac{1}{16}$ " hex. opening. Length 20". Weight 3 lbs.

No. 1150D, Chrome Alloy Steel, openings $\frac{7}{8}$ " hex and $\frac{11}{16}$ " hex. Length $\frac{15}{8}$ ". Weight 4 lbs.

No. 1150E, Leverage Bar. $1\frac{3}{16}$ " hex opening. Length 20". Weight 3 lbs.

SET No. 1150T, 1 each Nos. 1150A, 1150B and 1150C. Wt. 13 lbs. SET No. 1152T, 1 each Nos. 1150A, 1150B, 1150D, and 1150E. Weight 16 lbs.

These wrenches never fail. They carry the combination of eight openings (two square openings at the base of the hex sockets in Nos. 1150A and 1150B) which make the set universal for truck rim work.

No. 1150A is equipped with the three necessary opening sizes to make it a complete Ford wheel nut wrench, fitting Budd wheels. No. 1150B carries the three required openings to service all Chevrolet dual wheels.

No. 1150D has forged hex openings of $\frac{7}{8}$ " and $1\frac{1}{16}$ " and is ideal for rim work on International trucks. Chrome Alloy Steel is used for this wrench.

The 20" Hex Handle No. 1150C has a $1\frac{1}{16}$ " 6-point socket.

Leverage Bar No. 1150E has a $1\frac{3}{16}$ " hex opening which is necessary to service Motor Wheel rims, Reo, Federal, G.M.C. etc. It also forms a T handle with any of the wrenches illustrated.



An unusually well balanced hammer especially designed for removing tires that cling stubbornly to the rims. Extremely tough but not brittle eliminating the danger of

chipping or flying pieces. All corners are rounded or bevelled to avoid damage to tire or rim The head is firmly anchored to the hickory handle.



Drop Forged from Chrome Alloy Steel

Heat treated and plated. Length 14". Weight 3 lbs. 8 ozs.



The head of this mallet is solid, resilient rubber that permits its practical use where a metal hammer would cause damage. It is intended for tire changes

but is also popular for automotive body work, fender straightening and for use on materials that are subject to bruising and marring.



For Removing and Mounting Tires

The handle is firmly vulcanized into the head. Length 15". Weight 1 lb. 8 ozs. 6 to the box.



A practical and moderately priced tool for tire shops, service stations and garages. It rides easily around the entire circumference of the casing on the revolving rollers which are grooved to prevent slipping, making it unnecessary to remove the tool for complete inspection of the casing.

The two spindle rollers slip easily into the opening of the casing, spreading it with a simple pull of the long leverage handle, which is set at a 96° angle for clearance. The tip of the tool is curved to clear the opposite side.



Revolving Spindles

All corners are rounded to avoid injury to the hands even under the hardest pull. Adjustable to spread tires from $5\frac{1}{2}$ " to $7\frac{3}{4}$ ". Satin nickel finish. Leighth $18\frac{1}{2}$ ". Weight 2 lbs. 12 ozs.



No. 1134 "No-Pinch" Twin Tire Irons

Revolutionary Design for Drop Center Rims

Drop Forged from High Carbon Tool Steel

The respective ends are plainly marked "On" or "Off" to facilitate application.

To remove tire: use end marked "Off" which is formed to fit the contour of the rim. The small lip engages the bead of the tire and the heel rides on the edge of the rim in such position that the tool cannot pinch the tube. The offset creates a natural leverage that lifts the tire out of the rim holding it securely for safe entrance of the Twin Iron which easily levers the casing from the rim. The curve on the opposite end gives ample knuckle clearance between tool and the wheel.

To mount tire: use end marked "On". Place small hook over edge of rim with the bead of the tire on the curved section of the iron. As the tool is raised the tire automatically rides into position on the rim. The small lip avoids the hazard of pinching the tube but gives sufficient purchase to prevent slipping off. After casing is held in position with the first tool the Twin Iron readily assembles the next section on the rim.

Length 18". Weight 1 lb. 13 oz. Satin nickel finish.

Every tire service mechanic knows that all too many tubes are pinched, and casings distorted, through the use of outmoded or makeshift tire irons. Actual statistics compiled in shop research show that two to three tubes are thus ruined in the average shop every week.

Herbrand presents these "No-Pinch" Twin Tire Tools accurately engineered to fit the modern drop center rims, knowing that they work with a degree of ease and safety never before achieved. Careful shop tests dictated the correct length, the proper curves, offsets and lips to remove or replace tires with the least effort and absolute safety to hands, tubes and tires. Once used by the mechanic on an actual job, he will never be without them.



Side Ring Tool No. 1135

For Firestone and Other Rims

Drop Forged from Chrome Molybdenum Steel

Especially engineered for easy removal of the continuous side rings used on Firestone RI, RH and other standard rims.

Extra powered by a modern heat treating process and forged from round stock.

Finished in satin plate. Length 20". Weight 1 lb. 2 ozs.

The hook ends are shaped to positively engage the rings and wedge them from their seats with minimum effort. The heel of the tool creates a fulcrum that develops a powerful leverage under the pressure of the long bar. The hazards of distorting rings and injury to hands are eliminated and the rings are quickly removed with the greatest economy of time.





Curved Pattern No. 1127

Herbrand's Master Tire Irons were designed by tire experts for tire service men. The broad, thin paddle shaped blade takes hold of a larger area lifting the tire from the rim in a few easy strokes with a minimum of effort and time. Curved pattern No. 1127 is especially adapted to drop center type rims, permitting the operator to throw out, or force in bead without injury to knuckles or hub interference. The blunt handle end is designed to drive dual tires and rings on or off.

They are usually sold in pairs. The curved blade in combination with the straight one makes an unbeatable pair.

Spoon Type Master Tire Irons

Broad, Paddle Shaped Blades—For Passenger and Truck Tires

Drop Forged from Select Tool Steel—Heat Treated Throughout

Both patterns are available in two different lengths to efficiently handle the full range of tire work on all passenger cars, trucks and busses. Careful drop forging and special heat treating impart rigidity and unbreakable qualities. Finished in baked gray enamel.

For Passenger Car and Light Truck Wheel Service

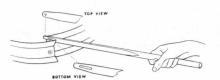
No. 1126, Straight pattern. Length 18". Weight 2 lbs. No. 1127, Curved pattern. Length 18". Weight 2 lbs.

For Work on Large Truck and Bus Tires

No. 1126T, Straight pattern. Length 23". Weight 2 lbs. 12 ozs. No. 1127T, Curved pattern. Length 23". Weight 2 lbs. 12 ozs.



The best tool in the tire field for unlocking and locking split type rims. Shaped just right for efficient use and 20" long for extra leverage, this tool is exceptionally well balanced. An outstanding exclusive Herbrand feature that all tire men will appreciate is the recessed grooves on the top and bottom of the working end. The round recess on the top hooks into the corner of the rim and holds it positively in place while the elongated groove on the bottom hooks into the opposite corner of the rim and rides the rim ends together.



Special Rim & Tire Iron No. 1125

Extra Long Leverage

Drop Forged from Tool Steel

This tool makes tire changes easier and faster and eliminates the hazards of slipping which often result in injury to the operator. It also makes an excellent tire iron. Drop forged, heat treated for extra strength and baked gray enamel all over. Length 20". Weight 1 lb. 12 ozs.





Wire Circular Brushes

For Roughing, Cleaning and Buffing
Heavy Duty Construction—Perfectly Balanced

No. 1136, 4" diameter. Thickness $\frac{7}{8}$ ". Weight 12 ozs. 1 to the box. Complete with $\frac{1}{2}$ " arbor adaptors.

No. 1137, 6" diameter. Thickness $1\frac{1}{16}$ ". Weight $1\frac{1}{2}$ lbs. 1 to box. Complete with $\frac{1}{2}$ " arbor adaptors.

Constructed of a special, tough, crimped steel wire, there are no better quality brushes available. The steel wire sections are locked into the metal hub parts under pressure, making a complete master unit. This permits the use of the greatest amount of wire and creates an exceptional density on the working face that will wear evenly down to the arbor.

Used on bench grinders and portable tools for general cleaning and roughing; also practical on flexible shafts.

Each wheel has a standard 2" opening and the interchangeable adaptors illustrated are supplied as regular equipment.



Carbon Cleaning Brush No. 1138

For Use with Portable Tools and Flexible Shafts

Metal Bound Construction

Diameter of shank $\frac{1}{4}$ ". Length of brush 1". Weight 8 ozs. Individually boxed.



Designed particularly for cleaning carbon from cylinder heads, blocks, valve ports, recesses, combustion chambers and for general cleaning around motors or cars. The heavy first quality crimped wire is firmly secured in the metal cup giving the brush extra long life and unusual wearing qualities. Fits electric drills, pneumatic tools, flexible shafts.



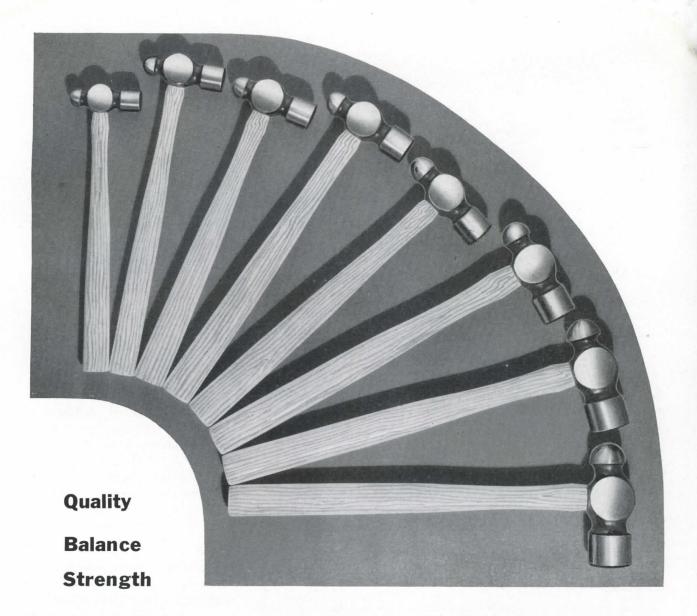
Tire and Rim Brush No. 1132

For Cleaning Rims and Casings

The brush part is 6" long. Length 14". Weight 7 ozs.

A good quality brush made of stiff, round steel wire. The 14" handle is curved to reach easily into the casings for cleaning. Handy for removing rust and dirt from rims and other parts.





Precisely controlled heat treatment applied to the select grade of steel from which these Hammers are drop forged imparts to them dependable and unusual qualities. They will not chip because they are tempered to conform to the safety standards being stressed in all industrial plants today.

They are well balanced and sturdy for ease of handling and long life under every day usage. The handles are of first grade, second growth hickory, properly seasoned, and are permanently fitted to the eye to prevent any loosening when in operation.

Van-Chrome Ball Pein Hammers

Highest Quality—Full Finished (Not Semi-Finished)

Drop Forged from Select Tool Steel and Heat Treated

Intended for the discriminating machinist and mechanic who demands the utmost in quality, finish and design.

Full finished with faces, peins and sides smoothly polished.

Number	Weight Lbs.	Each Ozs.	Length
BP- 2		2	10½
BP- 4		4	$11\frac{1}{2}$
BP- 8		8	13
BP-12		12	14
BP-16	1		14
BP-20	1	4	16
BP-24	1	8	16
BP-32	2		17
BP-40	2	8	18



Solid Drop Forged Open End Wrenches

Carbon Steel—Improved Designs

Drop Forged and Heat Treated

- 1. Especially built for manufacturers of machinery for standard equipment purposes and industrial application.
- 2. Latest improvements in construction and design.
- 3. Narrow pointed jaws and increased length provide maximum clearance and leverage.
- 4. Drop forged from a select quality of high carbon tool steel.
- 5. Heat treated and tempered their entire length providing both interior and surface hardness for the utmost endurance and dependability.
- 6. Ground smoothly all over and openings milled to unvarying accuracy.
- 7. Finished in Baked Black Enamel—durable and rust-resisting.
- 8. Herbrand quality throughout. They will not spread or break.
- 9. Prompt deliveries on all popular patterns and sizes.
- 10. For more than 60 years Herbrand quality and refinements in design have paralleled the requirements of the industry.

Finish Specifications

UNFINISHED wrenches are milled, smoothed, heat treated and finished in baked black enamel.

FINISHED wrenches are milled, surface and edges smoothed, heat treated and opening sizes stamped on the heads. Black enamel body with heads ground bright and lacquered.

SPECIAL OPENINGS. In lots of 100 or more of any size for which we have the necessary tools, wrenches with special openings will be supplied at no extra charge.

SPECIAL wrenches made to order to your own specifications.

In addition to manufacturing a broad range of automotive tools, Herbrand also produces a line of Carbon Steel Open End Wrenches in all the popular sizes. Among the standard types in stock are Engineers Wrenches, single and double end, and Structural Wrenches.

These Carbon Steel Wrenches are primarily built for manufacturers who equip their product with service tools and are broadly used for bridge building, structural work, car building, farm and road machinery and for practically all industrial uses.

The openings are milled with precise accuracy to fit all U.S.S. and S.A.E. standard nuts and cap screws. Also stocked with American Standard, Metric and Whitworth openings. They are readily available in a range of sizes that covers every likely need. Supplied in the unfinished or finished condition. Special openings are milled to order.

Among the users of Herbrand tools are many of the nation's largest and most prominent industries.





Herbrand Engineers' Wrenches

Drop Forged, 15° Angle, Single End

		For	For	For	For	Thick-	T	***	1	LIST	PRICE
No.	Opening Milled; Nominal	U.S. Std. Nuts; Size Bolt	Hex. Head CapScrews; Diam. Screws	S.A.E. Std. Nuts and CapScrews; Size Bolt	Nuts	ness Head; Approx.	Length Approx.		ght Each oprox. Ozs.	Unfin- ished	Fin- ished
00	5/16	1/8	1/8			5/32	$3\frac{1}{2}$		1	\$.22	\$.28
$\begin{smallmatrix}700\\0\end{smallmatrix}$	$\frac{3}{8}$ $13\frac{3}{32}$	3/16	3/16			$\frac{3}{16}$	4 4		1 1	$.24 \\ .24$.30 .30
701 1	7/16 1/2	1/4	1/4 5/16	1/4 5/16	1/4	$\frac{7}{32}$ $\frac{7}{32}$	$\frac{4\frac{5}{8}}{4\frac{5}{8}}$		1	.29 .29	.36 .36
$\begin{array}{c} 702 \\ 2 \end{array}$	9/16 19/ ₃₂	5/16	3/8 · · · ·	3/8	⁵ / ₁₆	$\frac{1}{4}$ $\frac{1}{4}$	$\frac{5\frac{1}{4}}{5\frac{1}{4}}$		$\frac{2\frac{3}{4}}{2\frac{3}{4}}$	$.35 \\ .35$.44 .44
703 3	5/8 11/16	3/8	7 ₁₆	7/16	3/8	$9\frac{32}{9}$	- 6 6		4 4	.42 .42	.52 .52
704 4	$\frac{3}{25}\frac{4}{32}$	7/16	1/2 	1/2	7/16	5/16 5/16	67/8 67/8		6	.52 .52	.64 .64
705 5	13/16 7/8	1/2	9/16 5/8	9/16	1/2 9/16	3/8 3/8	77/8 77/8		8 8	.62 .62	.76 .76
6A 6 706	$15_{16} \\ 31_{32} \\ 1$	9/16	3/4	5/8 11/ ₁₆	5/8	7/16 7/16 7/16	9 9 9		12 12 12	.76 .76 .76	.92 .92 .92
$\begin{smallmatrix} & 7 \\ 707 \end{smallmatrix}$	$\frac{11_{16}}{11_{8}}$	5/8	7/8	3/4	3/4	$\frac{1}{2}$ $\frac{1}{2}$	$10\frac{1}{4}$ $10\frac{1}{4}$	1		.96 .96	1.14 1.14
8 8A 708A	$1\frac{1}{4}$ $1\frac{5}{16}$ $1\frac{3}{8}$	3/4 	1 11/8	7/8 	7/8	9/16 9/16 9/16	$\begin{array}{c} 11\frac{1}{2} \\ 11\frac{1}{2} \\ 11\frac{1}{2} \end{array}$	1 1 1	8 8 8	1.28 1.28 1.28	1.50 1.50 1.50
$\begin{matrix} 9 \\ 709 \end{matrix}$	$\frac{17_{16}}{11_{2}^{1}}$	7/8	11/4	1	i	$\begin{array}{c}21_{32}\\21_{32}\end{array}$	$13\frac{1}{4}$ $13\frac{1}{4}$	$\frac{2}{2}$	$\frac{2}{2}$	$\frac{2.00}{2.00}$	$\frac{2.30}{2.30}$
10 10A	$\frac{15/8}{111/16}$	1	13/8	11/8	11/8	$\frac{3}{4}$ $\frac{3}{4}$	15 15	3	12 12	$\frac{2.80}{2.80}$	3.20 3.20
11 11A	$1\frac{13}{16}$ $1\frac{7}{8}$	1 1/8		11/4	11/4	$\frac{27}{32}$ $\frac{27}{32}$	$16\frac{3}{4}$ $16\frac{3}{4}$	$\frac{4}{4}$	4 4	$\frac{3.80}{3.80}$	4.20 4.20
12 12A	$\frac{2}{2^{1}_{16}}$	11/4		13/8	13/8	$\frac{15}{16}$ $\frac{15}{16}$	$18\frac{1}{2}$ $18\frac{1}{2}$	6 6	4 4	$5.20 \\ 5.20$	5.70 5.70
13 13A	$\frac{2^{3}}{16}$ 2^{1}	13/8		1½	11/2	$\frac{1}{1}\frac{1}{32}$ $\frac{1}{32}$	$20\frac{1}{4}$ $20\frac{1}{4}$	8	5 5	$\begin{array}{c} 6.70 \\ 6.70 \end{array}$	7.30 7.30
14 14A	$\frac{2\sqrt{3}}{27/16}$	$\frac{1\frac{1}{2}}{\dots}$			15/8	$\frac{1}{1}\frac{1}{8}$	$\frac{22\frac{1}{4}}{22\frac{1}{4}}$	10 10	4 4	8.25 8.25	9.20 9.20
15 15A	$\frac{2^{9}}{16}$ 2^{5} /8	15/8			13/4	$\frac{17}{32}$ $\frac{17}{32}$	$24\frac{5}{8}$ $24\frac{5}{8}$	12 12		$10.00 \\ 10.00$	11.20 11.20
16 16B 16A	$2\frac{3}{4}$ $2^{13}/_{16}$ $2^{15}/_{16}$	13/4 17/8			17/8	$1\frac{5}{16}$ $1\frac{5}{16}$ $1\frac{5}{16}$	27 27 27	15 15 15		11.90 11.90 11.90	13.40 13.40 13.40
17A 17	3 1/8	2			2	$\frac{13}{8}$ $\frac{13}{8}$	30 30	19 19	8 8	18.70 18.70	20.50 20.50
18	3½	$2\frac{1}{4}$				$1^{17}/_{32}$	33	27		27.50	29.50

All Single End Wrenches have tapered handles.





Herbrand Engineers' Wrenches

Drop Forged, 15° Angle, Double End

In stock with openings listed. When ordering be careful to specify catalog numbers, nominal size of openings and the finish desired. Opening sizes are stamped on the heads. Special openings milled to order. For description of finishes refer to page 48. Herbrand Carbon Steel Wrenches are heat treated and tempered their entire length. Finished in baked black enamel which is rust resisting and durable.

	Openings	For U.S. Std.	For	For	For	Thick-	T	Weight Each	LIST	PRICE
No.	Milled; Nominal	Nuts; Size Bolt	CapScrews; Diam. Screws	S.A.E. Std. Nuts and CapScrews; Size Bolt	Nuts	ness Heads; Approx.	Length Approx.	Approx. Lbs. Ozs.	Unfin- ished	Fin- ished
721 21	5/16 & 3/8 5/16 & 13/32	1/8 1/8 & 3/16	1/8 & 3/16 1/8			9 32 9 32 9 32	4 4	$\begin{array}{ccc} & & & 1\frac{1}{2} \\ & \ddots & & 1\frac{1}{2} \end{array}$	\$.28 .28	\$.34 .34
22 723 723A 23	5/16 & 1/2 3/8 & 7/16 3/8 & 1/2 13/32 & 1/2	1/8 & 1/4 1/4 3/16 & 1/4	1/8 & 5/16 3/16 & 1/4 3/16 & 5/16 5/16	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1/4	5/16 5/16 5/16 5/16	47/8 47/8 47/8 47/8	2 2 2 2	.34 .34 .34	.42 .42 .42
725 725A 725B 25	7 ₁₆ & 1 _{/2} 7 ₁₆ & 9 ₁₆ 1 _{/2} & 9 ₁₆ 1 _{/2} & 19 ₃₂	1/4 & 5/16	1/4 & 5/16 1/4 & 3/8 5/16 & 3/8	14 & 5/16 14 & 3/8 5/16 & 3/8	1/4 & 5/16 · · 5/16	$ \begin{array}{c} 11_{32} \\ 11_{32} \\ 11_{32} \\ 11_{32} \end{array} $	$5\frac{3}{4}$ $5\frac{3}{4}$ $5\frac{3}{4}$ $5\frac{3}{4}$	4 4 4	.40 .40 .40	.50 .50 .50
726 26 727 27C 27	1/2 & 5/8 1/2 & 11/16 9/16 & 5/8 9/16 & 11/16 19/32 & 11/16	1/4 & 3/8 1/4 & 3/8 3/8 5/16 & 3/8	5/16 & 7/16 5/16	5/16 & 7/16 5/16 & 7/16 3/8 & 7/16 3/8	3/8 5/16 & 3/8 5/16	3/8 3/8 3/8 3/8 3/8	65/8 $ 65/8 $ $ 65/8 $ $ 65/8 $ $ 65/8$	6 6 6	.50 .50 .50 .50	.62 .62 .62 .62
728 28 729 29	$\begin{array}{c} 9/16 \& 3/4 \\ 19/32 \& 25/32 \\ 5/8 \& 3/4 \\ 11/16 \& 25/32 \end{array}$	5/16 & 7/16 3/8 & 7/16	3/8 & 1/2 7/16 & 1/2 	3/8 & 1/2 7/16 & 1/2 	5/16 & 7/16 3/8 & 7/16	$ \begin{array}{c} 13_{32} \\ 13_{32} \\ 13_{32} \\ 13_{32} \end{array} $	7 3/4 7 3/4 7 3/4 7 3/4	8 8 8	.60 .60 .60	.7. .7. .7.
730 30 731 731A 31 731B	5/8 & 13/6 11/6 & 7/8 3/4 & 13/6 3/4 & 7/8 25/32 & 7/8 13/6 & 7/8	3/8 & 1/2 1/2 7/16 & 1/2 1/2	7/16 & 9/16 5/8 1/2 & 9/16 1/2 & 5/8 5/8 9/16 & 5/8	7/16 9/16 1/2 9/16 1/2 & 9/16 9/16 9/16	3/8 & 1/2 9/16 7/16 & 1/2 7/16 & 9/16 9/16 1/2 & 9/16	7 16 7 16 7 16 7 16 7 16 7 16	85/8 85/8 85/8 85/8 85/8 85/8	12 12 12 12 12 12	.74 .74 .74 .74 .74	.90 .90 .90 .90
32 732 33A 33 733 33C	$\begin{array}{c} 25_{32} \& 31_{32} \\ 13_{16} \& 1 \\ 7_{8} \& 15_{16} \\ 7_{8} \& 31_{32} \\ 7_{8} \& 1 \\ 15_{16} \& 1 \end{array}$	7/16 & 9/16 1/2 & 9/16 1/2 & 9/16 1/2	9/16 & 3/4 5/8 5/8 5/8 & 3/4 3/4	11/16 9/16 & 5/8 9/16 & 11/16 5/8 & 11/16	1/2 & 5/8 9/16 9/16 & 5/8 5/8	1/2 1/2 1/2 1/2 1/2 1/2 1/2	9 ⁵ / ₈	1 2 1 2 1 2 1 2 1 2 1 2	.90 .90 .90 .90 .90	1.10 1.10 1.10 1.10 1.10
34 734 34A 35 735	$^{7/8}$ & $^{11/6}$ $^{7/8}$ & $^{11/8}$ $^{15/6}$ & $^{11/6}$ & $^{11/6}$ $^{31/32}$ & $^{11/6}$ 1 & $^{11/8}$	1/2 & 5/8 1/2 5/8 9/16 & 5/8	5/8 & 7/8 5/8 & 7/8 	9/16 & 3/4 9/16 5/8 & 3/4 3/4 11/16	9/16 & 3/4 ····································	9/16 9/16 9/16 9/16	$ \begin{array}{c} 10 \frac{3}{4} \\ 10 \frac{3}{4} \\ 10 \frac{3}{4} \\ 10 \frac{3}{4} \\ 10 \frac{3}{4} \end{array} $	1 8 1 8 1 8 1 8 1 8	1.12 1.12 1.12 1.12 1.12	1.36 1.36 1.36 1.36
36 37 737A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	9/16 & 3/4 5/8 & 3/4	1 1 7/8	3/4 7/8	3/4 & 7/8	21_{32} 21_{32} 21_{32}	$\begin{array}{c} 12\frac{3}{8} \\ 12\frac{3}{8} \\ 12\frac{3}{8} \end{array}$	$ \begin{array}{ccccccccccccccccccccccccccccccccc$	1.62 1.62 1.62	1.92 1.92 1.92

Continued on page 51





Herbrand Engineers' Wrenches

Drop Forged, 15° Angle, Double End

(Continued from Page 50)

No.	Openings Milled; Nominal	For U.S. Std. Nuts; Size Bolt	For Hex. Head CapScrews; Diam. Screws	For S.A.E. Std. Nuts and CapScrews; Size Bolt	For Amer. Std. Nuts (Reg.); Size Bolt	Thick- ness Heads; Approx.	Length Approx.	Weight Each Approx. Lbs. Ozs.	Unfin- ished	Fin-ished
38 39 39A	$\begin{array}{c} 1\frac{1}{16} \& 1\frac{7}{16} \\ 1\frac{1}{4} \& 1\frac{7}{16} \\ 1\frac{5}{16} \& 1\frac{1}{2} \end{array}$	5/8 & 7/8 3/4 & 7/8	1 1 ¹ / ₄	34 & 1 78 & 1		3/4 3/4 3/4	$\begin{array}{c} 14\frac{3}{8} \\ 14\frac{3}{8} \\ 14\frac{3}{8} \end{array}$	3 8 3 8 3 8	2.40 2.40 2.40	2.80 2.80 2.80
40 41	$\frac{1\frac{1}{4} \& 1\frac{5}{8}}{1\frac{7}{16} \& 1\frac{5}{8}}$	34 & 1 78 & 1	$1 & & 1\frac{3}{8} \\ & & 1\frac{3}{8} \\ \end{array}$	$\begin{smallmatrix} 7/8 & 4 & 1 & 1/8 \\ 1 & & & 1 & 1/8 \\ \end{smallmatrix}$		$\frac{3}{4}$ $\frac{3}{4}$	$15\frac{1}{2} \\ 15\frac{1}{2}$	$\begin{array}{ccc} 4 & & 14 \\ 4 & & 14 \end{array}$	$\frac{3.30}{3.30}$	3.80 3.80
42 42A 42B 43	$\begin{array}{c} 17_{16} \& 1^{13}_{16} \\ 11_{2} \& 1^{11}_{16} \\ 11_{2} \& 17_{8} \\ 15_{8} \& 1^{13}_{16} \end{array}$	7/8 & 11/8 1 & 11/8	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 & 1¼ 1½ & 1¼	1 & 1½ 1 & 1½ 1 & 1¼	$\begin{array}{c} 27_{32} \\ 27_{32} \\ 27_{32} \\ 27_{32} \\ 27_{32} \end{array}$	17 17 17 17	6 6 6	4.60 4.60 4.60 4.60	5.30 5.30 5.30 5.30
44 44A 45	$\begin{array}{c} 15 \\ 8 \\ 111 \\ 16 \\ & 178 \\ 113 \\ 16 \\ & 2 \end{array}$	1 & 1¼ 1½ & 1¼	13/8	1½ & 1¾ 1¼ & 1¾	11/8 & 11/4	$ \begin{array}{c} 29 \\ 32 \\ 29 \\ 32 \\ 29 \\ 32 \end{array} $	19 19 19	8 2 8 2 8 2	$6.25 \\ 6.25 \\ 6.25$	7.20 7.20 7.20
46 47	$\begin{smallmatrix} 1^{13}/_{16} & \& & 2^{3}/_{16} \\ 2 & \& & 2^{3}/_{16} \end{smallmatrix}$	$1\frac{1}{8} & 1\frac{3}{8} \\ 1\frac{1}{4} & 1\frac{3}{8} $		$1\frac{1}{4}$ & $1\frac{1}{2}$ $1\frac{3}{8}$ & $1\frac{1}{2}$		1	21 21	10 8 10 8	$9.30 \\ 9.30$	10.5 10.5
48 49	$\frac{2}{2\frac{3}{16}} \stackrel{\&}{\&} \frac{2\frac{3}{8}}{2\frac{3}{8}}$	$\frac{1\frac{1}{4} \& 1\frac{1}{2}}{1\frac{3}{8} \& 1\frac{1}{2}}$		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$1\frac{1}{16}$ $1\frac{1}{16}$	$\frac{22\frac{1}{2}}{22\frac{1}{2}}$	13 8 13 8	$12.50 \\ 12.50$	14.00 14.00
50A 50B	$\begin{array}{c} 1\% \& 2\% \\ 2\% \& 2\% \\ \end{array}$				$1\frac{1}{4} & 1\frac{3}{4} \\ 1\frac{1}{2} & 1\frac{3}{4} $	$^{27}_{32}$ & $^{17}_{32}$ $^{11}_{32}$ & $^{17}_{32}$	25 25	14 4 14 8	$16.25 \\ 16.25$	18.0 18.0
51	23/8 & 29/16	11/ ₂ & 15/ ₈				11/8 & 17/32	25	14 12	18.00	19.80
52 52A	$\begin{array}{c} 2\frac{3}{8} \& 2\frac{3}{4} \\ 2\frac{7}{16} \& 2\frac{13}{16} \end{array}$	1½ & 1¾			15/8 & 17/8	$1\frac{1}{8}$ & $1\frac{5}{16}$ $1\frac{1}{8}$ & $1\frac{5}{16}$	27 27	16 12 17 8	$20.00 \\ 20.00$	22.0 22.0
53 53A	$\begin{array}{c} 29/_{16} \& 23/_{4} \\ 29/_{16} \& 2^{15}/_{16} \end{array}$	$1\frac{5}{8}$ & $1\frac{3}{4}$ $1\frac{5}{8}$ & $1\frac{7}{8}$		1.		$1\frac{7}{32} & 1\frac{5}{16} \\ 1\frac{7}{32} & 1\frac{5}{16} $	27 27	18 2 19 8	$\frac{22.00}{22.00}$	24.00 24.00
54A 54 54B	$2\frac{1}{4}$ & 3 $2\frac{9}{16}$ & $3\frac{1}{8}$ $2\frac{5}{8}$ & 3	15% & 2			$1\frac{1}{2} & 2$ $1\frac{3}{4} & 2$	$1\frac{1}{32} & 1\frac{3}{8} \\ 1\frac{7}{32} & 1\frac{3}{8} \\ 1\frac{7}{32} & 1\frac{3}{8} \\ 1\frac{7}{32} & 1\frac{3}{8} $	31 31 31	21 12 24 24	26.25 26.25 26.25	28.50 28.50 28.50
55	23/4 & 31/8	13/4 & 2				15/16 & 13/8	32	24 12	28.75	31.00
56A 56B	$2\frac{5}{8} & 3\frac{3}{8} \\ 2^{15}\cancel{16} & 3\frac{1}{2}$	17/8 & 21/4				$1\frac{7}{32}$ & $1\frac{17}{32}$ $1\frac{5}{16}$ & $1\frac{17}{32}$	34 34	28 29	37.50 37.50	40.00 40.00
57B 57	$\frac{3}{3\frac{1}{8}}$ & $\frac{3\frac{3}{8}}{3\frac{1}{2}}$	2 & 21/4				$1\frac{3}{8}$ & $1\frac{17}{32}$ $1\frac{3}{8}$ & $1\frac{17}{32}$	36 36	34	$44.25 \\ 44.25$	47.00 47.00



Herbrand Structural Wrenches

Straight Openings—Offset Heads

Drop Forged from High Carbon Steel

The quality and dependability of Herbrand Structural Wrenches is well established in the structural working field. They are widely used by the foremost bridge builders, ship yards and construction companies generally.

The deep and narrow jaws of these wrenches take a secure bearing on the nut. The offset head

provides clearance of obstructions and safety to the operator's hands. The long handles are tapered for ease in lining up bolt holes.

Finish: Structural Wrenches are heat treated their entire length for the utmost endurance and finished in baked black enamel. It is a rustresisting finish.

No.	Openings Milled; Nominal	For U. S. Std. Nuts; Bolt Size	For Amer. Std. Nuts, Reg.; Bolt Size	Thickness Head; Approx.	Length; Approx.	Offset		t Each; orox. Ozs.	List Price Black, Hardened
901A 901 901B 902	7/16 1/2 9/16 19/32	1/4 5/16	1/4 5/16	3/8 3/8 3/8 3/8 3/8	$\begin{array}{c} 10\frac{1}{2} \\ 10\frac{1}{2} \\ 10\frac{1}{2} \\ 10\frac{1}{2} \\ 10\frac{1}{2} \end{array}$	7/8 7/8 7/8 7/8 7/8		5 5 5	\$.80 .80 .80
903A 903 904A 904	$ \begin{array}{r} 5/8 \\ 11/16 \\ 3/4 \\ 25/32 \end{array} $	3/8 7/16	3/8 · 7/16 · · · ·	$ \begin{array}{c} 15 \\ 32 \\ 15 \\ 32 \\ 15 \\ 32 \\ 15 \\ 32 \end{array} $	$12\frac{1}{2}$ $12\frac{1}{2}$ $12\frac{1}{2}$ $12\frac{1}{2}$ $12\frac{1}{2}$	7/8 7/8 7/8 7/8		14 14 14 14	1.04 1.04 1.04 1.04
905A 905 906 906A	$ \begin{array}{c} 13\\ 16\\ 7\\ 8\\ 31\\ 32\\ 1 \end{array} $	1/2 9/16	1/2 9/16 · · · 5/8	$ \begin{array}{c} 17 \\ 32 \\ 17 \\ 32 \\ 17 \\ 32 \\ 17 \\ 32 \\ 17 \\ 32 \\ \end{array} $	$14\frac{3}{8}$ $14\frac{3}{8}$ $14\frac{3}{8}$ $14\frac{3}{8}$	1 1 1 1	1 1 1	5 5 5 5	1.30 1.30 1.30 1.30
907 907A	$\frac{1}{1}\frac{1}{16}$	5/8	3/4	39 ₆₄ 39 ₆₄	$\frac{16\frac{1}{4}}{16\frac{1}{4}}$	$\frac{1}{1}\frac{1}{16}$	2 2		$\frac{1.70}{1.70}$
908 908A	$\frac{1}{1}\frac{1}{4}$ $\frac{1}{5}\frac{1}{16}$	3⁄4	7/8	$23_{32} \\ 23_{32}$	$\frac{18\frac{1}{4}}{18\frac{1}{4}}$	$\frac{1}{1}\frac{1}{4}$	2 2	14 14	$\frac{2.20}{2.20}$
909 909A	$\frac{17}{16}$ $\frac{11}{2}$	7/8 · · ·	i	$\frac{3}{4}$	20 20	$\frac{1}{1}\frac{1}{4}$	4 4	7 7	$\frac{2.90}{2.90}$
910 910A	$\frac{15_{8}}{111_{16}}$	1	11/8	$\frac{13}{16}$ $\frac{13}{16}$	22 22	$\frac{15}{16}$ $\frac{15}{16}$	6	8	$\frac{3.90}{3.90}$

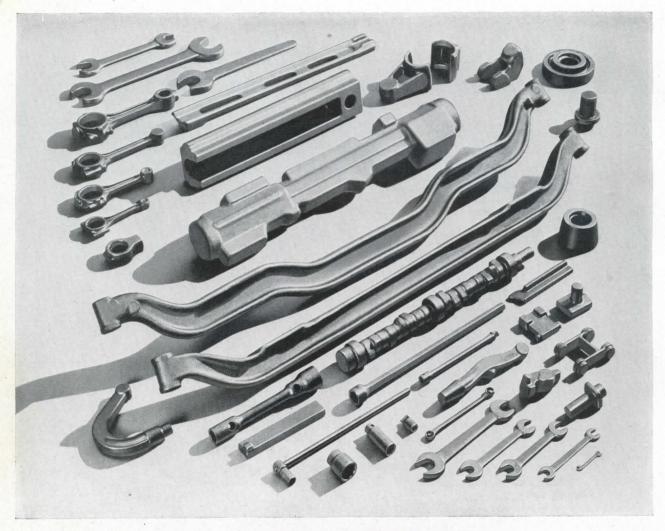
Nominal openings are listed, actual openings include proper clearance on rough nuts and bolts.



Wrench and Socket Openings and Sizes of Bolts and Nuts They Fit

Wrench Opening			American Std.			
ın	S.A.E. Std.	l	J.S.S.	Ameri	can Std.	
Inches Nominal Size	Screws and Nuts	Nuts	Cap Screws	Nuts	Cap Screws	
* 1/4	6. 6.		TRUE TO	4		
* 5/16		1/8	1/8	5 & 6		
* 14 * 516 * 38 * 716	110		3/16	10	112	
* 1/6 * 1/2	1/4 5/16	1/4	1/8 3/16 1/4 5/16	12 & 1/4	1/4 5/16	
	100	. 74				
* 9/16	3/8		3/8	5/16	3/8	
19/32	7/16	5/16	7/16	3/8	7/16	
*11/2		3/8		78		
*58 *11 16 * 34	1/2		1/2	7/16	1/2	
25/32 *13/		7/16	9/	12	9/16	
*13 ³² * 7/8	9/6	1/2	9/16 5/8	1/2 9/16	5/8	
15/16	9/16 5/8			> 10		
$\frac{15}{16}$ $\frac{31}{32}$		9/16				
*1	11/4		3/4	5/8	3/4	
*11/6	11/ ₁₆ 3/ ₄	5/8				
$*1^{1}_{16}$ 1^{1}_{8} $*1^{1}_{4}$			17/8	3/4	7/8	
$^{*1}_{15}^{14}_{16}$	7/8	3/4	1	7/8	i	
				78	1	
$1\frac{3}{8}$ *17/6 11/2 *15/8			11/8			
*17/16	1	7/8	iii	4	11/8	
*15%	11/8	i	11/4 13/8	1		
111/16	1/8			11/8	11/4	
	11/	11/				
$\frac{113}{16}$ $\frac{17}{8}$	11/4	11/8		11/4		
%	13/8	11/4				
$ \begin{array}{c} 21_{16} \\ 23_{16} \end{array} $				13/8		
$2\frac{3}{16}$	11/2	$1\frac{3}{8}$				
21/4				11/2		
23/8		11/2				
27/16		:::		15/8		
$2\frac{1}{4}$ $2\frac{3}{8}$ $2\frac{7}{16}$ $2\frac{9}{16}$ $2\frac{5}{8}$		$1\frac{5}{8}$		13/4		
				174		
$\begin{array}{c} 2\frac{3}{4} \\ 2^{13} \\ 6 \\ 2^{15} \\ 16 \\ 3 \\ \end{array}$		13/4		111		
$\frac{2^{13}}{16}$		17/8		17/8		
3			100	2		
31/8		2				
03/				91/		
$ \begin{array}{r} 3\frac{3}{8} \\ 3\frac{1}{2} \\ 3\frac{3}{4} \\ 3\frac{7}{8} \end{array} $		21/4		$2\frac{1}{4}$		
334		-/4	- 1	$2\frac{1}{2}$	19.19.14	
37/8		$2\frac{1}{2}$				
41/6				23/4		
$4\frac{1}{8}$ $4\frac{1}{4}$ $4\frac{1}{2}$ $4\frac{5}{8}$		23/4				
$4\frac{1}{2}$	B. T			3		
45/8		3				

^{*}These sizes are also for 8-point sockets.



Herbrand Precision Forgings

Upset or Drop Forged-Any Shape or Size up to 200 Lbs.

Strict adherence to the specifications and contour of the finished piece affects a real economy in Herbrand Drop Forgings because it reduces machining and finishing operations to a minimum. Expert hammersmiths, who have made forging their life business, maintain strictly uniform dimensions and close tolerances producing forgings which are free from defects.

In these days of high speed production the vital load-bearing parts of your product must have the ability to withstand the gruelling grind and punishment of high speed service. Herbrand forgings impart that enduring, inbuilt stamina because they are scientifically heat treated by definite processs in the latest automatic electrically controlled furnaces where constant temperatures and exact regulation give positive results.

Skilled and vigilant inspection is rigidly enforced. To help work out involved or difficult problems our engineering advisory staff is maintained on a scale commensurate with the highest engineering developments of the present day.

Herbrand provides the latest, modern forging facilities including steam hammers, board hammers, upset machines, bending machines, heat treating and die making equipment.

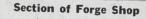
We have the organization and facilities to satisfy the most discriminating user and the "Diamond H" trade mark will be found on the vital forged parts of many of today's leading automobiles and industrial equipment.

Your inquiries are solicited.

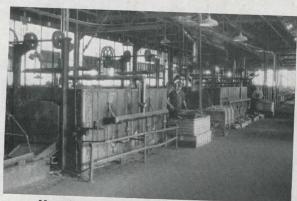








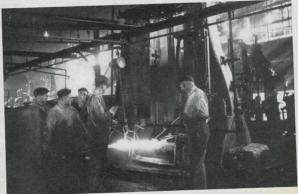




Heat Treating Normalizing Annealing



Die and Machine Department



Large Hammer In Operation



Upsetting Process



These Photographic Views Illustrate Some of The Important Operations in The Herbrand Plant



THE HERBRAND GUARANTEE

The name Herbrand or "Van-Chrome" on any tool constitutes your unqualified guarantee against defects in both workmanship and materials. This is positive assurance that they will do the job for which they are built, without spreading or breaking. Free replacements will be made on any tools that may prove defective. This guarantee is void if inspection shows that the tools have been abused, ground, heated, subjected to hammering or unreasonable leverage.

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